

# International Preservation News

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on Preservation and Conservation



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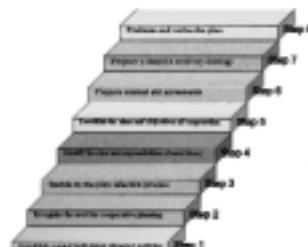
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## editorial

**P**reservation in Latin America and the Caribbean stands high among PAC priorities. Next IFLA conference will take place in Buenos Aires, August 2004, and a session will be devoted to one of PAC major fields of interest: **disaster planning**.

**D**isasters have already been the theme of a workshop organised last October at the UNAM\* in Mexico with the collaboration of the National Library and of ABINIA\*\*. With around a hundred participants representing various cultural institutions and actors from the civil society it concentrated on all issues related to the damages caused by earthquakes. This was the first of a series of workshops on disasters that PAC is organising in the Caribbean area, a region regularly threatened and damaged by natural disasters of all kinds. A second workshop is planned in Trinidad and Tobago next May with the cooperation of the National Library and under the umbrella of ACURIL\*\*\*. The National Library José Martí in Cuba will host a third workshop in 2005.

**T**hese workshops are meant to gather participants speaking the same language and coming from a restricted and neighbouring area. We thus expect them to weave a network of experts and professionals capable of helping each other in the event of a disaster.

**I**n order to better prepare the events above mentioned it is necessary to know more about disaster planning in the region and especially about the existing (or missing!) disaster plans written and implemented by national institutions. This is why PAC will launch a survey in the coming months and I thank in advance all directors and colleagues who will answer our questionnaire.

**A**s had been voted by IFLA Council in Glasgow all libraries in charge of collections of national interest should have a disaster plan. This is our aim for the next two years. What has happened to so many libraries in the course of history and more recently in Sarajevo and Baghdad proves how rapidly and irreversibly our memory can be destroyed and vanish forever. Let us be more prudent and become the keepers of the Memory of Mankind, an heritage that we certainly want to deliver sane and safe to our children and grand-children.

**I** am happy to announce that next year will see the creation of new regional PAC centres which will share responsibilities with the already existing centre in Caracas: the new centres, respectively hosted by the National Libraries of Brazil, Chile, and Trinidad and Tobago, will promote the dissemination of preservation information and documentation in the specific language they use, raise awareness on preservation issues and organise training sessions within the geographical area they are responsible for. I am particularly grateful to Celia Zaher, Clara Budnik and Pamella Benson for the interest they have always shown to PAC and for their support in the creation of these new centres.

**Marie-Thérèse Varlamoff**  
*IFLA-PAC Director*

\* UNAM Universidad Nacional Autonoma de Mexico

\*\* ABINIA Asociación de estados iberoamericanos para el desarrollo de las bibliotecas nacionales de los países de Iberoamérica

\*\*\*ACURIL Association of Caribbean University, Research and Institutional Libraries.



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## éditorial

La conservation en Amérique latine et dans la Caraïbe est l'une des toutes premières priorités du PAC. Le prochain Congrès de l'IFLA se tiendra à Buenos Aires en Argentine, en août 2004 et le PAC y organisera une session sur l'un de ses thèmes principaux de réflexion : la prévention des catastrophes.

Un atelier consacré aux tremblements de terre a été organisé en octobre dernier à Mexico en collaboration avec la Bibliothèque nationale et ABINIA\*. Une centaine de participants représentant les diverses institutions culturelles et les organismes du secours, ainsi que la société civile ont étudié les dommages et conséquences des tremblements de terre. Cet atelier est le premier d'une série que le PAC entend organiser dans les Caraïbes, une région régulièrement menacée et mise à mal par des catastrophes naturelles de toutes sortes. Un deuxième atelier est prévu à Trinité et Tobago en mai prochain, organisé en partenariat avec la Bibliothèque nationale et ACURIL\*\*. La Bibliothèque nationale de Cuba accueillera un troisième atelier en 2005.

Ces ateliers sont destinés à rassembler des participants parlant la même langue et venant de régions limitrophes. Nous espérons ainsi qu'ils tisseront un réseau d'experts et de professionnels, capables de s'entraider le cas échéant si survient une catastrophe.

Afin de mieux préparer ces manifestations, il est nécessaire d'en savoir davantage sur la prévention des catastrophes et en particulier sur les plans d'urgence mis en œuvre (ou inexistant !) par les institutions nationales. C'est pourquoi, dans les prochains mois, le PAC va lancer une enquête à ce sujet et je remercie à l'avance tous ceux, directeurs et collègues qui voudront bien répondre au questionnaire qui leur sera envoyé.

Selon la résolution votée lors de l'Assemblée générale de l'IFLA à Glasgow, toutes les bibliothèques responsables de collections d'intérêt national doivent se doter d'un plan d'urgence. C'est notre but pour les deux prochaines années. Ce qui est arrivé à trop de bibliothèques au cours de l'histoire et plus récemment aux bibliothèques nationales de Sarajevo et de Bagdad prouve à quel point notre patrimoine est fragile et peut à tout instant et de façon irréversible disparaître à jamais. Soyons prévoyants et sachons demeurer les gardiens de cette Mémoire de l'Humanité que nous souhaitons sans aucun doute transmettre intacte à nos enfants et petits-enfants.

Enfin, c'est avec plaisir que nous pouvons annoncer pour l'année prochaine la création de trois nouveaux centres régionaux PAC. Ils viendront étoffer le Centre de Caracas et seront respectivement hébergés par les bibliothèques nationales du Brésil, du Chili et de Trinité et Tobago. Leur tâche sera de disséminer l'information et de distribuer la documentation dans la langue utilisée dans leur région, de sensibiliser aux problèmes de la conservation et d'organiser des formations dans la zone géographique dont ils auront la charge. Je tiens à remercier tout particulièrement Celia Zaher, Clara Budnik et Pamella Benson pour l'intérêt qu'elles portent au PAC et pour leur soutien en ce qui concerne la création de ces nouveaux centres.

**Marie-Thérèse Varlamoff**  
Directeur d'*IFLA/PAC*



Photo : Sylvie Biscioni

# The Linköping Library Fire



by Per Cullhed,  
Acting Director  
of Cultural  
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Library



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The library after the fire

On a Friday evening, on the 20<sup>th</sup> of September 1996, an open house session was held in the lecture hall of the municipal library in Linköping, Sweden. This yearly occasion (dedicated to humanistic thought) was attended by some 400 persons and was interrupted at 11.08 PM by the fire alarm. Library personnel discovered smoke and flames coming from a small room on the second floor (the same floor as the lecture hall), and attempted to extinguish the fire by using a hose from an inside fire post, however they did not manage to turn on the water. The room was situated 28 meters from the fire-post, the hose being 25 meters long, and the communication between the persons in either end failed. By this time the stress level was already very high and after another fruitless attempt to use a hand held fire-extinguisher, they heard the fire brigade

arriving. At this point they decided to rush back, to alert the people in the lecture hall and to guide the fire-fighters to the place of the fire, leaving the door to the small room open.

Evacuation began at the same time as the fire brigade arrived at the library. They in turn had been alerted by the same fire alarm and arrived within three minutes after the alarm i.e. 11.11 PM. By this time the fire had spread from the small room over a wooden lattice framework in the ceiling. A fiber-board glued to the ceiling for acoustic reasons contributed largely to the spreading of the fire. As the wooden lattice framework burnt, the fiber boards also caught fire and started falling from the ceiling down to the library, acting like fire bombs spread all over the library hall. Even the experienced firemen were stunned to see how quickly and violently the fire spread throughout the library. 16 minutes after the alarm all attempts to extinguish the fire were in vain and the smoke-divers were called out as smoke gases had accumulated to such an extent that signs of a smoke-gas explosion became evident. A roaring sound signaled the explosion; the whole library was now alight. The time for the explosion was somewhere between 11.24-11.30 PM.

At this point, the responsible fire-fighting officer decided to stop extinguishing the fire in the library and rather focus on the surrounding houses. There were many reasons for doing this: a house for the elderly situated across a narrow alley from the library building, the houses being old and built mainly of wood and likely to catch fire. Moreover the fire-officer was informed of the older collections in the basement of the library building and this was another reason for concentrating the efforts to the surroundings. His responsibility is to save lives in the first place and thereafter all values that can be saved. This does not mean extinguishing at all costs. The house was already lost, and the fire could be confined to the main building, then it was logical to stop extinguishing to save the values that were more likely to be damaged by the water than the fire i.e. the books in the basement.

The fire continued throughout the Saturday and not until that evening was it possible to examine the basement with the collection of old books including a

# L'incendie de la Bibliothèque de Linköping

par Per Cullhed,  
Directeur par interim de la Section  
Patrimoine culturel,  
Bibliothèque universitaire d'Uppsala

Le 20 septembre 1996, un vendredi soir, la Bibliothèque municipale de Linköping (Suède) avait ouvert sa salle de conférences pour une manifestation "entrée libre". Quelques 400 personnes assistaient à cette manifestation annuelle (consacrée à la pensée humaniste), qui fut interrompue à 23h08 par l'alarme incendie. Les employés de la bibliothèque découvrirent de la fumée et des flammes qui provenaient d'une petite pièce du second étage (celui où se trouvait la salle de conférences) et tentèrent d'éteindre le feu à l'aide d'un tuyau qu'ils trouvèrent dans un local de sécurité-incendie, à l'intérieur du bâtiment ; mais ils ne parvinrent pas à ouvrir le robinet d'arrivée d'eau. 28 mètres séparaient la pièce du local incendie. Le tuyau mesurait 25 mètres et il fut impossible de communiquer entre les deux espaces. A ce moment-là, le degré de panique était déjà très élevé et après avoir vainement essayé d'utiliser un extincteur portatif, ils entendirent les pompiers arriver. Ils décidèrent alors de faire rapidement marche arrière, d'avertir les personnes présentes dans la salle de conférences et de guider les pompiers sur les lieux de l'incendie, ceci en laissant ouverte, la porte qui donnait accès à la petite pièce.

L'évacuation commençait au moment où les pompiers arrivèrent sur les lieux. Ils avaient à leur tour été alertés par la même alarme incendie et arrivèrent dans les trois minutes qui suivirent le déclenchement de l'alarme, c'est-à-dire à 23h11.

A ce moment-là, le feu avait progressé de la petite pièce jusqu'à la charpente réticulaire en bois du plafond. Un panneau de fibres collé au plafond pour des raisons d'insonorisation contribua largement à la propagation du feu. Comme la charpente brûlait, les panneaux de fibre s'enflammèrent aussi et commencèrent à tomber du plafond, tels des bombes incandescentes qui s'abattaient de toutes parts dans la salle de conférences de la bibliothèque. Même les pompiers expérimentés furent stupéfaits de voir la rapidité et la violence avec lesquelles le feu avait gagné la bibliothèque toute entière. Seize minutes après le départ de l'alarme, toute tentative pour éteindre le feu avait été vouée à l'échec et on déclencha le système de désenfumage parce que les émanations de fumée s'étaient

tellement accumulées que les risques d'une explosion due à ces émanations devenaient évidents. Un grondement annonça l'explosion ; à présent, la bibliothèque toute entière était en feu. L'explosion eut lieu entre 23h24 et 23h30.

A ce stade, l'officier responsable des opérations décida d'arrêter de lutter contre le feu à l'intérieur de la bibliothèque et de se concentrer plutôt sur les maisons voisines. Cela pour plusieurs raisons : seule une ruelle étroite séparait la bibliothèque d'une maison de retraite située de l'autre côté ; les maisons étaient anciennes, construites en majeure partie avec du bois et susceptibles de prendre feu. En outre, on informa le responsable que les plus anciennes collections se trouvaient dans le sous-sol du bâtiment, ce qui fut une raison supplémentaire pour concentrer les efforts sur les environs. Il est de son devoir de sauver les vies en priorité, seulement ensuite, tous les objets de valeur qui peuvent l'être. Cela ne veut pas dire éteindre le feu à tout prix. La bibliothèque était déjà détruite et le feu pouvait être circonscrit au bâtiment principal ; il était donc logique d'arrêter les opérations, ceci pour sauver les pièces qui étaient plus susceptibles d'être endommagées par l'eau que par le feu, c'est-à-dire les ouvrages conservés au sous-sol.

L'incendie continua toute la journée du samedi et il fallut attendre la soirée pour inspecter le sous-sol où se trouvaient la collection de livres anciens et les manuscrits, parmi lesquels des manuscrits médiévaux sur vélin marqués de sceaux à la cire, conservés en lieu sûr. Heureusement, les ouvrages stockés dans le sous-sol ne furent pas endommagés mais le plafond menaçait de s'effondrer, l'atmosphère était étouffante et extrêmement sèche.

On récapitula les événements de la façon suivante :

- pas de dommages corporels dûs à l'incendie. Les 400 personnes présentes à la manifestation furent évacuées saines et sauves.
- L'incendie fut déclenché par un pyromane. Une mèche de papier fut enflammée et abandonnée sur une chaise en cuir ; les panneaux de fibres du plafond prirent feu très rapidement. Une simulation effectuée sur ordinateur après la catastrophe révèle que le feu avait pris sur la chaise à 23h06, c'est-à-dire deux minutes avant le déclenchement de l'alarme. Le détecteur qui se trouvait dans la pièce était de ceux qui se déclenchent à la chaleur.

safe room for manuscripts, some of them medieval manuscripts on vellum with wax seals. Luckily, however, the books in the basement were not damaged, but the ceiling was in danger of collapsing and the atmosphere was hot and extremely dry.

A sum-up of the disaster gave the following facts.

- No persons suffered any physical damage from the fire. All 400 people attending the speech were safely evacuated.
- The fire was an arsonist's doing. Paper spill was ignited on a leather chair and the fiber-boards in the ceiling caught fire very rapidly. A computer simulation made after the fire states that the chair was burning at 11.06 PM, i.e. two minutes before the alarm. The detector in the room was of the heat-sensitive type.
- The fire was aimed at the information office dealing with the issue of immigration. The office was housed in the library for the simple reason that the owner, the City of Linköping, wanted to make efficient use of municipal buildings. Immigration being a controversial issue, the office had been threatened several times before. On the 3<sup>rd</sup> of September personnel from the information office and library staff had a meeting and among the decisions taken was one to change locks and eventually install cameras for survey. No arrests have been made as a result of the police investigations carried out after the fire.
- Approximately 150 000 monographs were destroyed as well as both periodicals and audio-visual materials.



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The remains of the card catalogue

- The older collections were not damaged apart from soot-damage, but the card catalogue housed in the main library building describing the 300-400 000 remaining books, was destroyed. There was no copy made so the remaining books were now uncatalogued.

- Two collections in display-cases were fire-damaged in the Benzelius-room, (named after a Librarian and Bishop of the 18<sup>th</sup> century). Many of these books were bound in original 18<sup>th</sup> century bindings with tight leather backs. The books, approximately 1000 in number, were kept in book-cabinets behind glass and although some glasses cracked, this probably saved them from being completely destroyed.
- A collection of portraits and museum objects were severely damaged.
- The water-damaged items were very few and a total of twenty cardboard boxes were sufficient to contain this material. They were frozen to avoid mold. The greater part of the water damaged books were damaged by leaking water pipes after the actual fire.
- As the on-line catalogue was undamaged, most of the burnt books could later be identified, and a good part of the remaining collection was out on loan. These books became the foundation for the new library, which was hurriedly organized in a new building.
- Both the building and the collections were insured.

Immediately after the fire a local salvage company, under the guidance of conservators from the Uppsala University Library, was engaged in evacuating the basement. The books and manuscripts were packed in cardboard boxes and palletized. The pallets were then covered with plastic sheeting with the dual purpose of holding the boxes together and avoiding sudden changes in moisture content. The idea was to retard any sudden changes and the plastic was supposed to be removed after a couple of days. As the evacuating task was so difficult and time-consuming the pallets were not unwrapped until after several weeks. This was a risky decision, but the extreme dryness had the advantage that mold could not develop and no damage caused by the evacuation could be seen on the books.

A huge cleaning program was now set up by the salvage company to remove the soot that smelled and left marks. It was decided not to use ozone as a deodorizer as this strongly oxidative gas might prove harmful especially to the old books with animal glue on the backs. As the soot had to be removed mechanically anyway, this process was the natural starting point. Two lines of cleaners, sometimes up to ten persons swiped off the soot using soot-sponges, a project that took a year to complete.

Following this and after a long time of planning between the insurance company and the library, a re-cataloguing program was set up. In fact this issue

- C'était le bureau d'information chargé des questions d'immigration qui était visé. Le bureau était hébergé par la bibliothèque simplement parce que le propriétaire, la ville de Linköping, souhaitait faire un usage efficace des locaux municipaux. L'immigration étant un domaine sujet à controverse, le bureau avait déjà été menacé plusieurs fois auparavant. Le 3 septembre, les employés du bureau d'information et le personnel de la bibliothèque s'étaient réunis et avaient décidé, entre autres, de changer les serrures et d'installer finalement des caméras de surveillance. L'enquête de police menée après l'incendie n'entraîna pas d'arrestations.
- Environ 150 000 monographies furent perdues auxquelles s'ajoutèrent les périodiques et les documents audiovisuels.
- Les collections plus anciennes ne souffrissent que des dégâts occasionnés par la suie ; mais le catalogue sur fiches qui se trouvait dans le bâtiment principal et permettait d'identifier les 300 à 400 000 autres ouvrages, fut détruit. Il n'existe pas de copie et ces ouvrages étaient à présent dépourvus de notices descriptives.
- Deux collections présentées dans des vitrines d'exposition, dans la salle « Benzelius » (du nom d'un bibliothécaire et évêque du XVIII<sup>e</sup> siècle) furent endommagées par le feu. Plusieurs de ces ouvrages comportaient des reliures originales du XVIII<sup>e</sup> siècle, le dos étant recouvert de cuir tendu. Les ouvrages, environ mille, étaient conservés dans des bibliothèques équipées de portes vitrées et bien que certaines de ces vitres se soient brisées, elles ont probablement tout de même empêché que les livres ne soient complètement détruits.
- Une collection de portraits et d'objets de musée fut sérieusement endommagée.
- Il y eut peu de pièces endommagées par l'eau et vingt boîtes en carton suffirent à stocker ces documents. Ils furent congelés afin d'éviter les risques de moisissures. La plus grande partie des livres endommagés par l'eau fut par les tuyaux d'arrivée d'eau qui fuyaient après ledit incendie.
- Comme le catalogue en ligne était intact, il fut possible d'identifier par la suite une grande quantité des ouvrages qui avaient souffert du feu. D'autre part, la collection restante avait été en grande partie prêtée à l'extérieur. Ces livres constituèrent la base de la nouvelle bibliothèque qui fut rapidement aménagée dans un nouveau bâtiment.
- Le bâtiment mais aussi les collections étaient assurés.

Immédiatement après l'incendie, une entreprise locale spécialisée dans le sauvetage, supervisée par une équipe de conservateurs de la Bibliothèque universitaire

d'Uppsala, fut engagée pour vider le sous-sol. Les livres et les manuscrits furent rangés dans des boîtes en carton, boîtes qui furent ensuite mises sur palettes.



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Cardboard boxes covered in plastic

Les palettes furent alors recouvertes d'un emballage en plastique, ceci afin de maintenir les boîtes rassemblées mais aussi pour éviter de brusques changements du taux d'hygrométrie. L'idée était de retarder tout changement brutal et le plastique était supposé être retiré quelques jours plus tard. Comme les opérations d'évacuation étaient particulièrement difficiles et nécessitaient du temps, les palettes ne furent pas déballées avant plusieurs semaines. C'était une décision risquée mais l'extrême sécheresse présentait l'avantage d'empêcher la prolifération des moisissures et on ne remarqua sur les livres aucun dégât qui aurait pu être lié à l'évacuation.

Une gigantesque opération de nettoyage était à présent engagée par l'entreprise de sauvetage pour enlever la suie qui avait provoqué odeur et tâches. On décida de ne pas utiliser l'ozone comme désodorisant dans la mesure où ce gaz très oxydant peut être nocif en particulier pour les livres anciens dont le dos est maintenu avec de la colle à base de graisse animale. Dans la mesure où la suie devait de toute façon être enlevée de façon mécanique, on devait naturellement commencer par cette opération. Deux équipes d'agents, parfois jusqu'à dix personnes, retiraient la suie à l'aide d'éponges spéciales ; un an fut nécessaire à l'aboutissement de cette entreprise.

Après cela et une longue période de programmation des opérations entre la compagnie d'assurance et la bibliothèque, un programme de re-catalogage fut mis en place. En fait, il semble que cette conséquence de l'incendie ait été la plus problématique. Comment procéder au re-catalogage de plusiers centaines de milliers de livres ? Ironiquement, c'est peut-être ce qui est le plus facile à éviter dans le sens où une copie, même une simple photocopie, aurait épargné des années de travail à la bibliothèque et d'énormes sommes d'argent à la compagnie d'assurance.

seems to have been the most problematic one in the aftermath of the fire. How to go about re-cataloguing several hundred thousands of books? Ironically this is perhaps the most avoidable task, as a copy, even a simple Xerox copy, would have saved the library years of work and the insurance company enormous amounts of money. The re-cataloguing project continued for several years, and the new on-line catalogue has cost well over three million euros.

Alongside the re-cataloguing work, another project was started. Its aim was to buy antiquarian books in order to build up a reference collection of books of local history interest, similar to the one that was destroyed by the fire. A wants-list was made and distributed to other libraries and archives and the antiquarian book market was swept for several years in trying to find the 13600 missing titles.

No sprinklers existed in the library building, but the fire alarm functioned properly although this did not suffice. The building was built in 1973 and should have withstood the fire better than it did. The choice of interior-decorating materials was, in this case, the weak point. The strongest point was the compartmentalization of the stacks in the basement. The fire brigade successfully managed to balance between not pouring on too much water and at the same time not risking a collapse of the basement ceiling although this was not too far off. The ceiling had to be strengthened before the evacuation of the books could take place.

The wet material as well as the two older collections from the Benzelius-room, were treated at the Conservation Department of the Uppsala University Library.



Fire-damaged book

The bindings were mostly damaged in the spines and the conservation work was concentrated on lifting the old spines, which in many cases were extremely fragile, and re-backing the book with new leather. The old spines were then mounted onto the new ones. The

goal with the conservation work was to make the volumes useable as books again while preserving what was left of the original bindings.

The wet books were treated in a freeze-dryer, which in fact is a rebuilt commercial freezer with an automatic defrosting unit. This process allows the books to be dried in what is known as sublimation, i.e. the ice will turn to vapor without melting in between. The method worked fine for this small book-collection with both leather and parchment covers, materials that need a gentle drying method. However, had a large number of books been water-damaged, it would have been necessary to use a more efficient drying technique, such as vacuum freeze-drying.

Summing up the lessons from the fire it is as always evident that preventive measures like the copying of unique catalogues is mandatory. Training of library personnel in handling fire-fighting equipment is also very important. An automatic sprinkler system would very likely have extinguished the fire and smoke-sensitive detectors are preferable to the heat-sensitive ones. Interior decorating materials or materials installed for acoustic reasons must be tested for their suitability in the case of a fire.

The library personnel suffered a lot as a result of the fire. From one day to another to have to change all your routines, tasks and environment, creates stress; and to rebuild everything takes time and a lot of patience.

A decision was soon taken to rebuild the library and the new house was inaugurated during the spring in the year 2000. The library building still contains the city archives as well as the municipal information office.

An underestimated risk lies in mixing different activities within the same building. From a municipal point of view, it might be argued that the information given to immigrants from the information office, is similar to providing information from the library. From a more technical point of view it is evident that housing collections in the same house as other municipal activities presents a risk. Such a risk can be minimized in planning a new building or by containing different activities in separate houses, but the main point here is that this special risk of mixing several functions within the same building must be recognized, and measures taken to reduce it. As modern libraries often grow to be cultural meeting points, this aspect may become more and more important and should be taken into account when planning a library building design.

Le travail de re-catalogage a duré plusieurs années et le nouveau catalogue en ligne a coûté bien plus de trois millions d'euros.

En parallèle avec l'opération de re-catalogage, on avait commencé un autre travail. Celui-ci consistait à acheter des livres anciens afin de constituer une collection d'ouvrages de référence sur l'histoire locale, semblable à celle qui avait été détruite par l'incendie. On fit une liste des ouvrages recherchés qui fut distribuée aux autres bibliothèques et aux services d'archives, et on écuma le marché du livre ancien pendant plusieurs années, en quête des 13 600 titres manquants.

Il n'y avait pas de sprinklers dans le bâtiment, mais l'alarme incendie fonctionnait correctement même si cela ne fut pas suffisant. Le bâtiment a été construit en 1973 et aurait dû résister au feu mieux qu'il ne l'a fait. La présence d'éléments de décoration intérieure était, dans ce cas, le point faible. Le point le plus positif était le cloisonnement des étagères dans le sous-sol. Les pompiers parvinrent à trouver une juste mesure entre le fait de ne pas déverser trop d'eau et celui d'empêcher un effondrement du plafond du sous-sol, même si nous n'en étions pas loin. Le plafond dut être consolidé avant que le déménagement des livres ne puisse se faire.

Les documents mouillés comme les deux collections plus anciennes de la salle « Benzelius » furent traités au Département Restauration de la Bibliothèque universitaire d'Uppsala. C'est au niveau du dos que les reliures étaient le plus endommagées et le travail de restauration consista tout d'abord à retirer le dos d'origine qui, la plupart du temps, était extrêmement fragile et à équiper le livre d'un dos fabriqué avec du cuir neuf. Le dos original était alors monté sur le nouveau. Le but de ce travail de restauration était de rendre les livres à nouveau utilisables tout en préservant ce qui demeurait des reliures originales. Les livres mouillés furent traités dans un congélateur semblable à ceux que l'on utilise dans le commerce, mais adapté et doté d'une fonction de dégivrage automatique. Ce procédé permet de sécher les livres selon le principe dit de « sublimation », c'est-à-dire que la glace se transforme en vapeur sans fondre dans l'intervalle. Cette méthode fut très efficace pour cette petite collection de livres qui comportaient des couvertures en cuir et en parchemin, matériaux qui nécessitent un séchage doux. Par contre, si un grand nombre de livres avait été endommagé par l'eau, il aurait fallu utiliser une technique de séchage plus performante, comme celle de la lyophilisation.

En un mot, des leçons que l'on peut tirer de l'incendie, on retiendra comme une évidence que les mesures préventives, la copie de catalogues uniques par

exemple, sont obligatoires. Il est aussi très important de former le personnel à la manipulation des équipements de lutte contre l'incendie. Un système automatique de sprinklers aurait probablement éteint le feu et des détecteurs de fumée sont préférables à ceux qui se déclenchent à la chaleur. Des éléments de décoration intérieure ou des équipements installés pour des raisons acoustiques doivent être testés pour leur résistance au feu.

Le personnel de la bibliothèque a beaucoup souffert des suites de l'incendie. Le fait de changer du jour au lendemain toutes ses habitudes, ses activités, le fait de changer d'environnement, sont sources d'anxiété ; et tout reconstruire nécessite du temps et beaucoup de patience. On décida rapidement de reconstruire la bibliothèque et le nouveau bâtiment fut inauguré au printemps 2000.



The new library on the day of opening 16<sup>th</sup> of March 2000

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Le nouveau bâtiment comprend toujours les archives de Linköping et le bureau d'information municipal. On sous-estime les risques qu'il peut y avoir à rassembler différentes activités dans le même bâtiment. Les services municipaux défendent que ce sont deux activités similaires que de donner des informations dans le bureau chargé de l'immigration ou dans la bibliothèque.

D'un point de vue plus technique, le fait d'héberger des collections dans un bâtiment où sont exercées d'autres activités municipales présente, de toute évidence, un risque. On peut minimiser un tel risque en prévoyant un autre bâtiment ou des locaux séparés adaptés à chaque activité ; mais l'essentiel ici est de reconnaître ce risque particulier qui existe dans le fait de rassembler différentes fonctions dans le même lieu et de prendre des mesures pour le contrôler.

A l'heure où les bibliothèques se transforment souvent en lieux d'échanges culturels, cet aspect pourrait devenir de plus en plus important et doit être pris en compte lorsqu'on imagine l'architecture d'une bibliothèque.

## **Biblioteca municipal de Linköping: revisión de una catástrofe**

En la noche del 20 de septiembre de 1996, un pirómano prendió fuego a la Biblioteca municipal de Linköping, Suecia. El objetivo que se buscaba destruir era la oficina de información encargada de los problemas de inmigración cuya sede se encuentra en la biblioteca. El incendio se propagó tan rápidamente que dieciseis minutos después de que se disparara la alarma, todas las acciones iniciadas por los bomberos ya habían fracasado. En los minutos siguientes, se produjo una explosión provocada por las emanaciones de humo que se acumularon en grandes proporciones. El incendio continuó durante el siguiente día.

Las 400 personas presentes esa noche fueron evacuadas sanas y salvas. En lo que respecta a las colecciones, la biblioteca perdió 150.000 monografías, publicaciones periódicas, documentos audiovisuales y la totalidad de su catálogo en fichas del cual no existía copia. Las colecciones más antiguas, afortunadamente almacenadas en el sótano, no sufrieron los daños provocados por el fuego; luego se inició una gigantesca operación de limpieza para reparar los daños. A continuación hubo un largo período de reconstrucción, durante la cual fue necesario aplicar el catálogo de Orecatalogación y realizar un trabajo de prospección para reconstituir una parte del fondo. Para la primavera de 2000, se inauguró un nuevo edificio.

Varios actuaron en contra de la salvaguarda de la biblioteca y sus colecciones. No se disponía de rociadores de agua y los detectores eran del tipo que se activan por la acción del calor. Los elementos de decoración interior y un equipo instalado por razones acústicas favorecieron la propagación del fuego. Por otra parte, el hecho de albergar en un mismo lugar diferentes actividades municipales representaba un riesgo. Cuando las bibliotecas se convierten cada día más en sitios de intercambio cultural, es indispensable reconocer ese riesgo para poder minimizarlo.

# Hurricanes: Nature's Weapon of Mass Destruction



by John Aarons,  
Government Archivist  
of Jamaica

Hurricanes are tropical cyclones which are weather systems with well-defined circulation and wind speeds of at least 74 miles per hour (118 km/h). They are like giant whirlwinds in which air moves in a large spiral around the centre of an area of low-pressure which is called the "eye". Known in the Pacific as typhoons, they are called hurricanes in the Western Hemisphere after it is said, "Hurican", the native Indian god of evil.

A hurricane can be a weapon of mass destruction as the high winds, heavy rainfall, floods and storm surges associated with it, can create devastation over a wide area. Houses are damaged or destroyed, power lines and trees are blown down, cars swept away, roads blocked and utility services disrupted. The intensity of the hurricane depends on its wind strength and this is measured on a scale, called the Saffir-Simpson Hurricane Intensity Scale of 1 to 5 with:

- 1 being minimal,
- 2 moderate,
- 3 extensive,
- 4 extreme,
- 5 catastrophic.

A category 5 hurricane is a devastating natural phenomenon as it has wind speeds in excess of 155 mph (249 km/h) and storm surges higher than 18 feet (5.6 meters). This is frightening news to the residents of Florida who remember the destruction of life and property as a result of the 17 foot storm surge created in 1992 by hurricane 'Andrew', the most destructive hurricane on record to strike the United States of America causing damage in excess of \$26 billion. At the time of impact, 'Andrew' was only a category 4 hurricane.

Although hurricanes mainly affect the countries of the Caribbean, Central America and the Gulf Region of the United States, they sometimes affect states of the northeast seaboard of the United States and Canada. This happened as recently as September 2003 when hurricane 'Isabel' made landfall in North Carolina and created havoc in a wide area as far north as Pennsylvania and New York.

Hurricane 'Isabel' had reached the status of a category 5 hurricane between September 11<sup>th</sup> to 15<sup>th</sup> while it was still in the Atlantic Ocean, but had been downgraded to a category 2 hurricane when it came ashore in North Carolina on September 18<sup>th</sup>. Still, 'Isabel' was directly responsible for at least 13 deaths with at least 17 more indirectly related to it. The hurricane also caused extensive wind and water damage in North Carolina, Virginia and Maryland. It knocked out electric power supply to more than 3.5 million people, disrupted air traffic and shut down Washington DC for two days. It eventually dissipated over Canada.

As hurricanes need warm tropical oceans, moisture and light winds, they form in the mid Atlantic Ocean, Caribbean Sea or the Gulf of Mexico usually between the months of June and November which is known in the region as the hurricane season. Preparing for the season is a regular activity and there is even a rhyme which all school children learn by heart. It says:

June	too soon
July	stand by
August	come it must
September	remember
October	all over

However this rhyme is no longer accurate as the hurricane season now peaks in September and very often hurricanes can occur in October and November, especially in the Western Caribbean basin. For example, one of the most dangerous hurricanes of the 1998 season was 'Mitch' which formed in late October and became a category 5 hurricane on October 26<sup>th</sup>. This hurricane caused an estimated 9,000 deaths in Central America with another 9,000 missing. In 1997, 'Lenny', another dangerous hurricane, formed in mid November. Hurricanes are therefore unpredictable and the number and strength of them vary from season to season.

Hurricanes originate as tropical depressions which are organized systems of clouds and thunderstorms with a well-defined circulation and top winds of less than 39 mph. Hurricane 'Isabel' for example, began as a westward moving tropical depression over the eastern tropical Atlantic on the 6<sup>th</sup> of September 2003. It became a tropical storm later that day and a hurricane on the 7<sup>th</sup> when its wind speed reached 74 mph.

Tropical storms are easily identifiable by name, as experience has shown that the use of short, distinctive given names in written as well as spoken communications is quicker and less subject to error than the older more cumbersome latitude-longitude identification methods. Until World War II, they were given masculine names after which the system changed and they were given female names. Since 1953, they have been named from lists originated by the National Hurricane Center and now maintained and updated by an international committee of the World Meteorological Organization. In 1979 male and female names began to be alternated. The first hurricane of the season is given a name starting with the letter A, the second with the letter B and so on.

Monitoring hurricane development is the responsibility of the National Hurricane Center in Miami which is a branch of the Tropical Prediction Center (TPC). The Center prepares and issues forecasts, watches and warnings with text advisories. Thanks to modern technology therefore, hurricanes can be tracked very early from the time they form as tropical waves off the African coast and move across the warm, tropical ocean waters. While predictions are made of the likely path of a hurricane, the exact path is very hard to predict, so there are many uncertainties. Also, it is important to note that the wind and rain cover wide areas and they begin to affect an area long before the centre of the hurricane has reached that particular area.

### **Hurricane 'Gilbert'**

A classic example of a hurricane which developed quickly with disastrous consequences is Hurricane 'Gilbert' which had its origins as the twelfth tropical depression of the 1988 season on September 8, 1988 while approaching the Windward Islands in the Caribbean. It became tropical storm 'Gilbert' on Saturday September 10 and was upgraded to a hurricane on the morning of Sunday September 11. Hurricane force winds and rain began to affect Jamaica that night and by the time the 'eye' came ashore at the eastern end of the island at around

10:30 the following morning (September 12), it had become a category 3 hurricane with winds over 111 mph.

Jamaica experienced a 'direct hit' by this hurricane which took eight hours to cross the island, which is 144 miles in length - spreading confusion and despair over the two million population. Winds gusted to nearly 150 mph as the hurricane produced a 9-foot storm surge along the country's northeast coast.

The damage to the country was catastrophic - 26 persons killed, hundreds of thousands of people homeless, 40% of houses damaged or destroyed, roads impassable and agricultural crops totally wiped out. The damage was chiefly caused by high winds, torrential rain and flooding caused, in part, by storm surges in low lying coast areas. The rain continued for several days following the passage of the hurricane.

After it left Jamaica it strengthened and reached category 5 status on the afternoon of the 13<sup>th</sup> and eventually reached peak winds of 185 mph. 'Gilbert' crossed the northeast coast of Mexico's Yucatan peninsula on September 14<sup>th</sup>, becoming the first category 5 hurricane in the Atlantic basin to strike land since 'Camille' in 1969.

'Gilbert's large size and impact were felt over much of the Caribbean, Central America as well as portions of the United States. The death toll of 318 in 10 countries of the region gives an idea of the enormity of the power of this hurricane.

Hurricane 'Gilbert' is significant in the history of hurricanes not only on account of the extensive damage it caused, but because it was one of the strongest Atlantic tropical cyclones of record and the first of the mega hurricanes of the closing years of the 20<sup>th</sup> century. It was the precursor of later and more dangerous hurricanes such as 'Hugo' (1989), 'Andrew' (1992), 'Mitch' (1998) and 'Lili' (2002). As a result of changing climatic conditions in the world, hurricanes have become larger and more dangerous and increasing attention is being placed on them and their progress from the African coast across the Atlantic Ocean is closely monitored.

## **Damage and Loss of Books and Records**

For librarians, archivists and other information professionals in developing countries - especially from small tropical island states - the experiences in Jamaica of recovering from hurricane 'Gilbert' have some important lessons for disaster preparedness and response. Fortunately, none of the country's major libraries or the national archives suffered any serious damage to their buildings so their collections were unharmed. However, chiefly on account of the widespread damage done to buildings as well as the rain which went on for several days, many smaller libraries lost material and countless numbers of records and books in offices and homes all around the country became soaked or were scattered. Much of the loss which occurred was not so much the result of the actual damage to the materials, but to the uncertainty and lack of knowledge on how to salvage wet materials.

The Government was conscious of the damage done to records, as the damage to government offices was extensive. The National Library of Jamaica was asked as a matter of urgency to produce and circulate guidelines for salvaging water damaged records. These were published in the media. The response received showed that the information was valuable not only to institutions but to private individuals, many of whom regretted not having the information earlier.

A team from the National Library headed by the author of this paper, visited a number of institutions to provide advice and assistance in recovery efforts. While genuine appreciation was shown for these visits, many did not result in the intended benefits. This was not only because some of the material had already been lost, but because many persons were not psychologically prepared to cope with the problems confronting them as they had given no prior thought to disaster preparedness measures and in particular to identifying their vital and important materials.

Recovery efforts were seriously hampered by the fact that there was no electricity so fans could not be used to assist in the drying process. Freezing of the wet books was definitely out of the question for the few

facilities which had freezers operated by generators were hard pressed to keep essential food and medical items. With constant rain, no air-conditioning and the absence of fans, it was hard to control the environment.

The all island Jamaica Library Service was hard hit as many of its branches were damaged. Overall the Service lost over 150,000 books and periodicals. The library which suffered the most was the library of the Norman Manley Law School situated on the campus of the University of the West Indies in Kingston. The authorities had taken precautions against the hurricane and had installed metal shutters over the large plate glass windows which enclosed the library. However the high winds dislodged two of the shutters and one of the panes of glass broke. Wind entered the building causing the internal pressure to build up and this resulted in a whole wall consisting of 15 panes of glass to blow outwards. A section of the roof was also removed. The driving wind blew the rain inside and soaked a large part of the collection, scattering books and papers, damaging furniture and soaking the carpet. During this period 50% to 75% of the collection was exposed to water damage.

Salvage operations were affected by the rain which fell daily for around three weeks after the hurricane had passed. As there was no electricity, freezing of the wet books was out of the question. There was also a delay in repairing the building because the University's maintenance crew was stretched in repairing the lecture rooms and the halls of residence to allow the University to reopen. As the University itself had suffered severe damage, there were few dry places in adjacent buildings to which the affected books could be moved.

Today, the library staff is still uncertain as to the amount of material lost as a result of the hurricane as a large amount of material had to be discarded. However a fair amount was salvaged, although a number of items had to be rebound before they could be returned to the shelves.

## **Conclusion**

The story of what happened to Jamaica as a result of hurricane 'Gilbert' could have happened to any other country. The country was not prepared for a disaster of this magnitude. The last hurricane to have struck the island occurred in 1951 so several generations had grown up without experiencing a hurricane. The speed at which the hurricane travelled did not give persons much time to prepare for it, especially as it developed over a weekend when offices and businesses were closed.

An active season can have 8 to 10 hurricanes and recent years have witnessed major hurricanes which flatten every thing in their path. Because of 'global warming', the frequency of these mega hurricanes is likely to increase. Time Magazine in an article on September 18, 2003 spoke of a "sense of rising menace" as part of the legacy of hurricane 'Isabel' as scientists fear that conditions favourable to the development of larger hurricanes "will probably persist for at least a decade and maybe longer". This is not very comforting news for small countries of the region which are particularly vulnerable to hurricanes as they can

create major damage to their economies as well as to their physical infrastructure.

These disasters pose special challenges to librarians and archivists in the region especially those in small island states. Many of the standard recommendations on responding to a disaster such as to stabilize the environment or freeze wet books are not always possible because of the absence of electricity. There is also the great difficulty in having the salvage of wet or damaged information materials regarded as a priority in a situation in which a disaster has affected the entire country with communications and public utility services disrupted, and food and medical supplies in short supply. In such a situation, the population is preoccupied by personal survival. Only by careful planning and clearly conceived response measures can information professionals hope to secure the safety of their collections.

## **Biographical Information**

John Aarons is the Government Archivist of Jamaica since November 2002. Prior to that he was Deputy Director of the National Library of Jamaica, 1979-1992 and Director from 1992 to 2002.

### **Huracán: fenómeno devastador**

Los huracanes son ciclones tropicales que se manifiestan bajo la forma de tornados gigantescos, junto con vientos de por lo menos 118 km/h. Van acompañados de lluvias torrenciales y maremotos, por lo que constituyen fenómenos meteorológicos devastadores. La intensidad de un huracán va de 1 a 5 de acuerdo con la escala de Saffir-Simpson:

- 1 para mínimo,
- 2 para moderado,
- 3 para mayor,
- 4 para extremo,
- 5 para catastrófico.

Los huracanes afectan principalmente al Caribe, América Central y ciertas regiones del sur de los Estados Unidos, pero golpean a veces también la costa este de los Estados Unidos y Canadá. Se forman a partir de depresiones tropicales, en el medio del Atlántico, en las Antillas o el Golfo de México, entre junio y noviembre. Se le dan nombres cortos y característicos para poder identificarlos fácilmente.

El huracán « Gilbert » golpeó la isla de Jamaica en septiembre de 1988, matando a 26 personas, dejando cientos de miles de damnificados, devastando todo a su paso, viviendas, carreteras y cultivos agrícolas. Éste fue el primero de una serie de huracanes extremadamente violentos que azotaron los últimos años del siglo XX.

Los numerosos daños que provocó, particularmente a las bibliotecas pequeñas, y el esfuerzo de reconstrucción que se requirió después, dieron la oportunidad para que los profesionales de la información aprendieran varias lecciones en materia de preparación y lucha contra catástrofes. Ante un desastre de tal magnitud, cuando la población debe luchar para salvar su propia vida, generalmente es difícil organizar el salvamento de documentos. Es por ello, dentro un contexto climático que parece actualmente favorecer el desarrollo de huracanes cada vez más violentos, que la solución más sabia consiste en hacer énfasis en la prevención.

# L'ouragan : arme de destruction massive de la nature

par John Aarons,  
Archiviste du Gouvernement  
de Jamaïque

Les ouragans sont des cyclones tropicaux, phénomènes météorologiques qui se manifestent selon des courants circulaires bien définis avec des vents qui soufflent à une vitesse d'au moins 118 km/h. Ce sont comme de gigantesques tornades à l'intérieur desquelles l'air se déplace en larges spirales autour du cœur d'une zone de basses pressions qu'on appelle « l'œil ». Appelés « typhons » dans le Pacifique, ce sont des « ouragans » dans la moitié ouest du globe, du nom d'une divinité indienne de cette région, « Ouragan », Dieu du mal.

Un ouragan peut être une arme de destruction massive parce que les vents violents, les pluies abondantes, les inondations et les raz-de-marée qui l'accompagnent sont capables de dévaster une région entière. Les maisons sont endommagées ou détruites, les lignes à haute tension et les arbres sont abattus par le vent, les voitures balayées, les routes condamnées et les services d'utilité publique interrompus. L'intensité de l'ouragan est fonction de la force du vent qui se mesure sur l'échelle dite de Saffir-Simpson graduée de 1 à 5 :

- 1 pour minimum,
- 2 pour modéré,
- 3 pour majeur,
- 4 pour extrême,
- 5 pour catastrophique.

L'ouragan de niveau 5 est un phénomène naturel dévastateur dans la mesure où les vents soufflent à plus de 249 km/h et où les raz-de-marée dépassent 5,6 mètres de hauteur. C'est une information effrayante pour les habitants de Floride qui se souviennent du raz-de-marée d'une hauteur de 5,1 mètres qui a détruit en 1992 des vies humaines et des biens, une des conséquences de « Andrew », l'ouragan le plus destructeur enregistré aux Etats-Unis, responsable de plus de 26 milliards de dollars de dégâts. Au moment où il a frappé, « Andrew » n'était qu'un ouragan de niveau 4.

Bien que les ouragans touchent principalement les Caraïbes, l'Amérique centrale et les régions du sud des Etats-Unis partiellement rattachées au continent, ils frappent parfois les états de la côte nord-est des

Etats-Unis et du Canada. C'est ce qui s'est produit très récemment, en septembre 2003, quand l'ouragan « Isabel » a provoqué un glissement de terrain en Caroline du Nord et a fait des ravages sur une vaste étendue allant aussi loin dans le nord que les états de Pennsylvanie et de New York.

L'ouragan « Isabel » avait atteint le degré 5 entre le 11 et le 15 septembre alors qu'il se trouvait encore au-dessus de l'Océan atlantique mais il était redescendu au niveau 2 en abordant la Caroline du Nord, le 18 septembre. Pourtant, « Isabel » fut directement responsable de la mort d'au moins treize personnes et, de façon indirecte, d'au moins dix-sept autres. L'ouragan provoqua aussi des dégâts considérables dûs au vent et à l'eau, en Caroline du Nord, en Virginie et dans le Maryland. Il priva de courant électrique plus de trois millions et demi de personnes, interrompit le trafic aérien et bloqua l'accès à la ville de Washington pendant deux jours. Il se dissipa finalement sur le Canada.

Comme les ouragans ont besoin des courants chauds des mers tropicales, d'humidité et de vents légers, ils se forment au milieu de l'Océan atlantique, dans les Antilles ou le Golfe de Mexico, habituellement entre juin et novembre, un moment qu'on appelle dans ces régions la saison des ouragans. Se préparer pour la saison est une activité habituelle et il existe même un poème que les écoliers apprennent par cœur. Voilà ce qu'il dit :

*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.*

Mais ce poème n'est plus vraiment d'actualité dans la mesure où la saison des ouragans atteint maintenant son point culminant en septembre et très souvent, les ouragans peuvent se produire en octobre et novembre, particulièrement dans la partie ouest de la mer des Antilles. Par exemple, « Mitch », l'un des ouragans les plus dangereux de la saison de 1998 se forma à la fin du mois d'octobre et devint un ouragan de niveau 5 le 26 octobre. Cet ouragan fut responsable d'environ 9000 morts en Amérique centrale et de 9000 disparus. En 1997, « Lenny », un autre terrible ouragan se forma à la mi-novembre. Les ouragans sont donc imprévisibles ; leur nombre et leur force varient d'une saison à l'autre.

Les ouragans trouvent leur origine dans des dépressions tropicales, phénomènes organisés comprenant des nuages et des orages avec des courants circulaires bien définis et des vents maximum de moins de 62 km/h. L'ouragan « Isabel » par exemple commença, le 6 septembre 2003, au-dessus de l'Océan atlantique, au niveau du Tropique du Cancer comme une dépression tropicale qui se dirigeait vers l'ouest. Il se transforma en tempête tropicale plus tard dans la journée et en ouragan le 7 quand la vitesse du vent atteignit 118 km/h.

Les tempêtes tropicales sont facilement identifiables par leur nom ; en effet, l'expérience a montré que l'utilisation de noms donnés, courts et caractéristiques, tant à l'écrit qu'à l'oral, est plus rapide et moins sujette à l'erreur que les méthodes d'identification plus anciennes et plus contraignantes selon la latitude et la longitude. Jusqu'à la seconde guerre mondiale, on leur attribuait des noms masculins, après quoi le système a changé et on leur a donné des noms féminins. Depuis 1953, les noms qui leur sont donnés proviennent de listes établies par le Centre national de recherches sur les ouragans, à présent entretenues et mises à jour par le Comité international de l'organisation météorologique mondiale. En 1979, on a commencé à alterner noms masculins et féminins. Au premier ouragan de la saison, on attribue un nom qui commence par la lettre A, au second un nom qui commence par la lettre B, etc.

Surveiller la progression de l'ouragan relève de la responsabilité du Centre national de recherches sur les ouragans (Miami) qui est une branche du Centre de prévisions de météorologie tropicale. Le Centre prépare et émet des bulletins météorologiques, des bulletins de surveillance et d'alerte accompagnés de conseils. Grâce à la technologie moderne donc, on peut suivre très tôt le trajet des ouragans, dès qu'ils se forment en vagues tropicales à partir de la côte africaine et se déplacent à travers les eaux chaudes des régions tropicales de l'océan. Si l'on peut prévoir le trajet probable d'un ouragan, il est très difficile d'anticiper son trajet exact et il existe donc beaucoup d'incertitudes. Il est également important de noter que le vent et la pluie couvrent des territoires entiers et qu'ils commencent à

endommager un endroit longtemps avant que le cœur de l'ouragan n'ait atteint le territoire en question.

### L'Ouragan « Gilbert »

« Gilbert » est l'exemple type de l'ouragan qui s'est développé rapidement avec des conséquences désastreuses ; il a trouvé son origine dans la vingtième dépression tropicale de la saison de 1988, le 8 septembre, en approchant les îles Winward dans les Antilles. Il devint la tempête tropicale « Gilbert » le samedi 10 septembre et atteignit la violence d'un ouragan le matin du dimanche 11 septembre. Des vents et de la pluie de la puissance d'un ouragan commencèrent à toucher la Jamaïque dans la nuit et le temps que l'œil approche les rivages de la pointe est de l'île aux environs de 10h30 le lendemain matin (12 septembre), il était devenu un ouragan de niveau 3 avec des vents dépassant les 177 km/h.

La Jamaïque fut frappée « de plein fouet » par cet ouragan qui mit huit heures à traverser l'île, longue de 230 kilomètres, semant la confusion et le désespoir parmi les deux millions d'habitants. Les vents soufflaient en rafales à près de 240 km/h au moment où l'ouragan provoquait un raz-de-marée d'une hauteur de 2,7 mètres le long de la côte nord-est du pays.

Le pays subit des dégâts catastrophiques – 26 personnes tuées, des centaines de milliers de sans-abri, 40 % des habitations endommagées ou détruites, des routes impraticables et des cultures agricoles totalement ravagées. Les dégâts furent principalement causés par les vents violents, les pluies torrentielles et les inondations provoquées en partie par les raz-de-marée sur les régions côtières de basse altitude. La pluie continua de tomber plusieurs jours après le passage de l'ouragan.

Après avoir quitté la Jamaïque, il se renforça et atteignit le niveau 5 dans l'après-midi du 13 ; les vents culminèrent finalement à une vitesse de 296 km/h. « Gilbert » traversa la côte nord-est de la péninsule mexicaine du Yucatan le 14 septembre, devenant ainsi le premier ouragan de force 5 de l'Océan atlantique à frapper le pays depuis « Camille », en 1969.

De nombreux pays des Caraïbes et de l'Amérique centrale aussi bien que certaines régions des Etats-Unis ressentirent la puissance considérable de « Gilbert » et le choc qu'il provoqua. On dénombra 318 victimes dans dix pays de la région, ce qui donne une idée de la puissance dévastatrice de cet ouragan.

L'ouragan « Gilbert » marque un moment significatif dans l'histoire des ouragans, non seulement à cause des dégâts considérables qu'il a provoqués mais parce qu'il fut l'un des cyclones tropicaux les plus violents de l'Océan atlantique et le premier des ouragans gigantesques qui frappèrent les dernières années du XX<sup>e</sup> siècle. Il fut suivi par des ouragans plus dangereux tel « Hugo » (1989), « Andrew » (1992), « Mitch » (1998) et « Lili » (2002). En raison de l'évolution des conditions climatiques dans le monde, les ouragans sont devenus plus importants et plus dangereux ; c'est pourquoi on leur consacre de plus en plus d'attention et on surveille soigneusement leur progression depuis la côte africaine, d'un côté à l'autre de l'Océan atlantique.

### **Livres et collections : dommages et pertes**

L'expérience de reconstruction de la Jamaïque après le passage de l'ouragan « Gilbert » a permis aux bibliothécaires, aux archivistes et à d'autres professionnels de l'information des pays sous-développés - particulièrement des petits états des îles tropicales - de tirer des leçons importantes en matière de préparation et de lutte contre les catastrophes.

Heureusement, aucun des principaux bâtiments de bibliothèques ou de services d'archives nationales n'a souffert de sérieux dommage, si bien que les collections ont été préservées. Par contre, les dégâts considérables subis par les bâtiments aussi bien que la pluie qui n'a cessé de tomber pendant plusieurs jours ont provoqué la perte de documents et de collections en quantité innombrable dans plusieurs bibliothèques plus petites ; dans les bureaux et les maisons, sur tout le territoire, les livres se sont retrouvés trempés ou dispersés. La plupart des pertes qui s'ensuivirent n'était pas tant la conséquence des dommages réels

occasionnés aux documents que le résultat de l'incertitude et du manque de connaissances quant aux moyens de sauver les documents mouillés.

Le gouvernement avait conscience des dégâts subis par les collections dans la mesure où les bureaux de l'administration d'Etat furent considérablement endommagés. On demanda à la Bibliothèque nationale de la Jamaïque d'établir et de distribuer de toute urgence des directives pour organiser le sauvetage des collections endommagées par l'eau. Ces directives furent diffusées par les médias.

Les réponses obtenues ont montré que ces informations ont non seulement été utiles aux institutions mais aussi aux particuliers, dont la plupart ont déploré qu'elles ne leur soient pas parvenues plus tôt.

Une équipe de la Bibliothèque nationale dirigée par l'auteur de cet article a rendu visite à un certain nombre d'institutions pour soutenir les efforts de reconstruction en apportant conseils et secours. Bien que ces visites aient été accueillies avec une véritable gratitude, elles ont rarement eu le résultat escompté. Pas seulement parce que certains documents avaient déjà été perdus mais parce que de nombreuses personnes n'étaient pas psychologiquement préparées à affronter des problèmes qui les confrontaient au fait qu'elles n'avaient pas pensé à organiser de mesures préventives de lutte contre les catastrophes et en particulier à identifier des documents qui étaient pour elles d'une importance vitale.

Les efforts de reconstruction furent sérieusement freinés par l'absence d'électricité et on ne pouvait donc utiliser les ventilateurs pour accélérer le séchage. On oublia définitivement l'idée de congeler les livres mouillés dans la mesure où les rares possibilités offertes par les congélateurs fonctionnant sur groupes électrogènes étaient essentiellement mises à profit pour conserver des denrées essentielles, nourriture et médicaments. Avec une pluie continue, sans air conditionné ni ventilateurs, il était difficile de contrôler l'environnement.

L'administration territoriale des bibliothèques fut gravement touchée et plusieurs de ses divisions furent endommagées. La totalité des pertes se monta à 150 000 livres et périodiques.

La bibliothèque qui souffrit le plus fut celle de l'Ecole de Droit Norman Manley située sur le campus de l'Université des Antilles, à Kingston. Les autorités s'étaient prémunies contre l'ouragan en installant des volets mécaniques par-dessus les grandes baies vitrées qui entouraient la bibliothèque. Pourtant, les vents violents déplacèrent deux de ces volets et l'une des baies se brisa. Le vent pénétra dans le bâtiment, provoquant l'accumulation d'une telle pression à l'intérieur qu'un mur entier constitué de quinze panneaux de verre vola en éclats à l'extérieur. Une partie du toit fut également arrachée. Le vent déchaîné projetait la pluie par rafales à l'intérieur du bâtiment et trempa une grande partie des collections, épargnant livres et journaux, endommageant le mobilier et inondant la moquette. A ce moment-là, 50 à 70% des collections fut exposé aux risques inhérents à l'inondation.

Les opérations de sauvetage furent gênées par la pluie qui tomba quotidiennement pendant environ trois semaines après le passage de l'ouragan. L'absence d'électricité rendait impossible la congélation des livres mouillés. Il y eut également du retard dans la réparation du bâtiment parce que l'équipe de maintenance de l'Université était mobilisée pour remettre en état les salles de lecture et les résidences universitaires afin que l'Université puisse rouvrir. Comme l'Université elle-même avait été sérieusement touchée, il restait peu d'endroits secs dans les bâtiments adjacents où stocker les livres endommagés.

Aujourd'hui, le personnel de la bibliothèque ne connaît pas encore avec certitude le nombre de documents perdus à la suite de l'ouragan parce qu'une grande partie des documents a dû être jetée. Néanmoins, on a pu en sauver une faible part même s'il a fallu refaire les reliures d'un certain nombre de pièces avant que les ouvrages ne puissent réintégrer les étagères.

## Conclusion

Ce que l'ouragan « Gilbert » a provoqué en Jamaïque aurait pu se produire dans n'importe quel autre pays. Le pays n'était pas préparé à une catastrophe d'une telle ampleur. La dernière fois qu'un ouragan s'était abattu sur l'île, c'était en 1951 et plusieurs générations avaient grandi sans avoir vécu ce phénomène. La vitesse à laquelle l'ouragan s'est déplacé n'a pas donné aux personnes suffisamment de temps pour s'y préparer, à plus forte raison dans la mesure où il est survenu en fin

de semaine quand les bureaux et les commerces étaient fermés.

Une saison chargée peut comporter entre huit et dix ouragans et ces dernières années ont connu des ouragans extrêmes qui dévastent tout sur leur passage. Il est probable que le « réchauffement de la planète » augmente encore la fréquence de ces ouragans d'une extrême violence.

Dans un article du 18 septembre 2003, Time Magazine évoquait un « sentiment de menace grandissante », hérité du passage de l'ouragan « Isabel ». De la même façon, les scientifiques craignent que des conditions favorables au développement d'ouragans plus importants « ne persistent probablement pendant au moins une décennie et peut-être plus longtemps. » Cela n'est pas très rassurant pour les petits pays de cette région qui sont particulièrement vulnérables parce que les ouragans peuvent provoquer des dégâts considérables sur leur économie et leur infrastructure.

Ces catastrophes représentent un défi particulier pour les bibliothécaires et les archivistes de cette région, spécialement ceux des petites îles. De nombreuses recommandations officielles en matière de lutte contre les catastrophes, celle de stabiliser l'environnement ou de congeler les livres mouillés par exemple, ne sont pas toujours applicables à cause du manque d'électricité. Il est aussi très difficile de considérer comme une priorité le sauvetage de documents d'information mouillés ou endommagés lorsqu'une catastrophe a frappé un pays entier, interrompant les télécommunications et les services d'utilité publique et que les réserves de nourriture et de médicaments sont rares.

Dans une telle situation, la population est préoccupée par sa propre survie. Ce n'est que par une anticipation soigneuse et des mesures de lutte contre les catastrophes clairement établies que les professionnels de l'information peuvent espérer assurer la sécurité de leurs collections.

## Informations biographiques

John Aarons est Archiviste du Gouvernement depuis novembre 2002. Avant d'occuper ce poste, il fut le Directeur adjoint de la Bibliothèque nationale de la Jamaïque de 1979 à 1992, puis son Directeur, de 1992 à 2002.

# Early Days of the Disaster Recovery Planning in the Estonian Historical Archives



by Indrek Kuuben,  
Director of Estonian  
Historical Archives,  
Deputy State  
Archivist of  
Estonian National  
Archives

*NB: the author takes responsibility for the opinions that are expressed in the following paper.*

I would like to share with you my observations about disaster recovery planning activities and emergency preparedness as they were developed in the past few years in the Estonian Historical Archives. First of all, I should concede that I do not have a very detailed idea of security issues and thus, my viewpoint might be regarded as an outsider's opinion by specialists in this field.

## **Impact of the Features of the Transitional Period in Estonia**

As the modern rescue philosophy focuses mainly on people, all plans and strategies have been designed to protect above all people and protecting material assets is only secondary to the concept of protecting human resources. Unfortunately, the developments in the Estonian society tend to badly alienate large social groups, which raises a paradoxical question: if the most important factor in the democratic society is people, then what exactly is the most important factor? Protecting cultural values is also of utmost importance for archival institutions, as their basic task consists in preserving the memory of the nation, thus if a choice has to be made between safety of people and safety of archival records, in some cases compromises must be sought for.

In general the most important as well as the most complicated task is to create the favourable atmosphere to emphasize on the importance of

security issues and measures to take in case of emergency so that awareness of these issues could be deeper rooted in our general frame of mind and patterns of behaviour. In Estonia there are two negative factors, which might appear to be obstacles for achieving the results that are currently striven for. The first one is the general atmosphere prevailing in the society. After getting free from the totalitarian society, some of the principles which had kept the society functioning were rejected, principles of civil defence among them that despite military background, included some essential features of civil protection. This is only in recent years that the aspects neglected after regaining independence have been started to be developed again. This is not an easy task, especially in the liberal market economy, where fierce discussions about the necessity of state interference and role of free market are constantly being held.

Secondly, it should be emphasized that archival institutions, which under the totalitarian system were used to control and limit information access and served as institutions of restricted access, are completely open now; and we have often much easier access to information preserved in archives than in the old democracies. The opening of archives has been achieved rather rapidly, which to some extent has brought along some instability, because new norms have not been established yet and old norms are not valid any more.

## **Disaster Recovery Planning – Focused on Human Factor**

As we know, risk awareness and measures to minimize the risks are essential factors of disaster recovery planning. Above all, risks threatening archival premises, archival records and people are under consideration here. The risks may result from both technical and human factors. Moreover, we should pay attention to the risks arising from the process of development and implementation of disaster recovery planning itself. As in both cases the main concern is the work with

people, the present analysis is going to focus on the aspect of human factor.

I would like to avoid going deep into details of disaster recovery planning; the readers should refer to the chronological table at the end of the article to find these elements of information.

Inside the archives there are four target groups:

- the management,
- the disaster response team,
- the rest of the staff
- the users / visitors.

The relation of different target groups to disaster recovery planning is definitely very different from one group to another.

### **Management Task – Providing Comprehensive Overview**

It is crucial that the management should have some thorough understanding of disaster recovery planning, as the resources allocated to these activities need to be sufficient and the implementation of the disaster plans regarded as a continuous process, not a one-time task. At this level of responsibility, it is not some lack of feeling of responsibility or risk awareness that might be encountered, but unfortunately, just a passive attitude towards the security issues. Ideally, the general manager of the institution should be the person in charge of disaster recovery planning; in reality this is very often not the case, although it might happen in smaller institutions.

The managers' responsibilities should certainly be regarded from a wider point of view. There are two basic functions in any archival institution, which have greater impact on the condition of archival records than disaster recovery planning activities: these are preservation and use of records. As far as the impact on archival records is concerned, the functions are contradictory. In this respect the most essential task of the manager seems to consist in finding a reasonable balance and implementing proper systems to support it. In the last 10–15 years, the main trends in the Estonian Historical Archives have corresponded to the main developments in the Estonian society. Due to the political changes the society needed easier access to archives; on the other hand, the use of archives for both the societal reforms and history research increased rapidly. Archivists were not only active intermediators

providing the information needed by the society; they also acted as researchers and attention paid to preservation issues consequently decreased. During the last ten years, as a result of intensive and systematic development of preservation practices, the degree of protection of archival records and awareness of security issues have increased. But as any system tends to move from order to chaos, it is crucial to pay constant attention to keep the systems under control. At the same time, it is obvious that the risks caused by the use of records are not to be diminished by restricting access to the records.

To reach the satisfactory balance and serve the needs of both preservation and use of records, comprehensive solutions (creating backup and user copies, appropriate rules regulating the procedures in research reading rooms and repositories) should be striven for. Hereby it might be necessary to emphasize that a solution can be regarded as a comprehensive solution only if the processes resulting from different functions are congruous or at least not conflicting.

And another question needs to be asked: is the situation in an archival institution adequately controlled without disaster recovery planning? Or another question: what does the term "disaster recovery planning" exactly mean? Most of us understand the term within certain (I would even say quite narrow) limits, meaning that it gains crucial importance in case of emergencies or for emergency preparedness actions and is not relevant for everyday practices. And the headline of the present article seems to a certain extent to reflect the same attitude.

### **Implementing the Disaster Recovery Plan – Issues to Consider**

I invited my colleagues to a quick interview. Part of the feedback I got was quite astonishing for me. One of my colleagues among the executive staff thought that the disaster recovery planning was dull and irksome. The background of such (hopefully not very common) an attitude might be explained by rigidity of thought, which I dare say is quite widespread. Disaster recovery planning is regarded as a separate field of activity by the employees at the top management level, implementing level and also executive level. To some extent the reasons are quite obvious. For the staff in charge of implementing the security system, the quickest and most efficient way to protect the archival

premises, archival records and people in archives is to manage the project and also speak and write about it (at any stage of implementation) as a specific one. As the way of thinking is determined by language, it is clear that for an archivist the location of a fire extinguisher in an archival building is not related to the security of the archives, but to the disaster recovery plan, which he has probably just once read... This is the reason why it seems essential to me to focus on broader concepts, encompassing different components into general practices and everyday activities, and not to deal too thoroughly with specific terms.

First implementing and then developing systems, secondly establishing practices form a system of multi-level tasks which takes a lot of time to set up. The likeliest problem here is to concentrate on specific actions instead of ongoing development of systems, to solve problems and deal with possible conflict areas.

As far as implementation is concerned, the most essential factor is the availability of a key person, who has the general understanding of the basics of disaster recovery planning, who is competent and capable of involving his/her colleagues. In Estonia the pioneering disaster recovery planning person is Ruth Tiidor, Head of Preservation Department in the Estonian Historical Archives. In this respect our position is better than that of other Estonian archives, as the person responsible for disaster recovery planning at the state level is also in charge of preservation issues in the Estonian Historical Archives, so here preparedness and state supervision go together.

Dealing with security risks is of crucial importance. The factor to be considered is that there is a long way from risk awareness (awareness of the risks specified in the risk analysis) and seeking for solutions to carry out the implementation of the countermeasures. Therefore these problems need to be constantly dealt with. Although the task of the crisis management team (I would like to use a more convenient term, "security team") set up according to the requirements specified in the disaster recovery plan is to organize the rescue operations for people and archival records in case of emergency, it also plays an important role in everyday life. Besides training for emergency preparedness, the members of the security team are involved in developing the security policies as well as elaborating the terms provided by them. Traditional

principles have been followed while setting up the security team of the Estonian Historical Archives and it is headed by the director of the archives. Three members out of four are the heads of departments respectively in charge of conservation, use and administration. All the members are male. According to our experience, it was a wise decision to designate the middle managers as members of the team, because they are responsible for both material and human resources and thus additional explanations in these areas are not needed. Being at the same time members of the security team, they carry double load of responsibility in security issues. It has to be mentioned, that over the last two years the team members' motivation and general awareness of security issues have considerably increased.

### **Increasing Personnel Awareness and Involvement**

As for involving the whole staff, we must keep in mind that the final target is not disaster recovery planning in itself, but consists in raising awareness among the whole staff. Awareness seems to be increasing in correlation with progress achieved in disaster recovery planning, and this is the factor which has to be put into practice. When they were asked about the change of attitude towards security issues during the disaster recovery planning period (approximately two years), most of the colleagues admitted that the degree of awareness had increased. The main reason for that seems to be that there is enough information available now about possible hazards. Besides increased awareness of the hazards, disaster recovery planning makes people think about their possible behaviour in case of emergency. In connection with that, the general emergency preparedness as well as personal sense of responsibility have increased.

Positive attitude of the staff towards disaster recovery planning forms a good basis on which satisfactory results in real emergency situations can be achieved. But this is not enough. Adequate behaviour patterns in case of disaster can only be achieved through real emergency training. Proper training is essential for all employees of the archives and therefore professional support from outside is needed. In Estonia the state institution in charge of rescue issues is the Estonian Rescue Board; one of its missions is to consult people

and institutions about emergency preparedness and its assistance has been quite important to us. Training has to be systematic and include both theoretical and practical sessions. The practical side concentrates on important details such as recognizing the sound of the fire alarm or memorizing the location of the protective equipment. The members of the security team in the Estonian Historical Archives must also know the location of important units of water supply and electricity systems. As far as training is concerned, we are still in the initial phase. The practical training sessions concerning the use of fire extinguishers for the whole staff and evacuation training for the members of the security team have been carried out. By the time the article will be published the general evacuation training will most probably have been carried out, which includes all the employees of the archives as well as users and visitors. Speaking from my own experience, I think that the essential information (general instructions, location of rescue equipment and behaviour patterns of the security team) must be revised at least every six months; the general evacuation training has to be carried out once a year.

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### **Some Major Risks Connected with Material Resources**

Disaster recovery planning is a two-sided activity. On the one hand the level of emergency preparedness of the staff has to be increased; on the other hand security risks must be dealt with. Measures to minimize risks are connected with the human factor as well as material resources. The measures to be taken are largely determined by the state of the archival premises.

I would like to briefly introduce now the solutions concerning the tangible assets. Which are the factors of critical importance in this field? In the premises specifically designed for archival purposes, risks are minimized, which has also a certain influence on the degree of risk awareness among employees.

The risks derived from the architecture of the premises of the Estonian Historical Archives are besides other factors connected with the balance between the repository area and the area for public use. Avoiding additional details, I would only like to mention that according to the risk analysis, in case of emergency,

the fire can get beyond control very rapidly. The last flood occurred about ten years ago and was caused by worn out water pipes. Since then a lot of attention has been paid to modernization of the signalization system, electricity and central heating systems. Presently we can say that those systems in the archives satisfy the established requirements.

The second major risk factor is connected to the fact that the work, service and repository areas are not clearly separated, which requires special attention to be paid to access regulations. It will be very time-consuming and require substantial financial resources to achieve a satisfactory result in this area. Building new premises for the Historical Archives has been under consideration for a long time. Up to now, structural changes have been carried out, and more functional space has been allocated for repository and other areas. Repository areas have been reorganized: instead of being situated on four floors as they were before, they are located on three floors. The regulations for the use of different areas involve technical solutions (such as magnetic cards, special systems for locking the doors, etc.), but also the necessity to follow the internal procedure rules.

### **Finally – Some General Observations and Suggestions**

Eventually, I would like to review some general observations and suggestions. In general archivists are well aware of the uniqueness and great value of the archival holdings they are responsible for and they are quite sensitive to possible hazards. Therefore the idea is rather deeply rooted that keeping to the former traditional ways of thinking and behaviour patterns is quite enough to ensure the safety of the archives and that implementation of additional measures is not necessary. And there is a long way from psychological preparedness to real readiness for emergencies. It is very important, but not crucial, to find efficient solutions to technical questions. The focal point is the human factor, and we should concentrate on training or on the control of routines and behaviour patterns.

- Prioritize your targets. The main aim is not disaster recovery planning; it is to increase the level of safety and reduce the risks through implementing the disaster recovery plan.
- Establish safety requirements, but consider the feasibility of satisfying them. Try to create a situation in case it would be impossible, or at least very inconvenient, to ignore the requirements. For example it is not enough to tell the staff to close the doors; investments in sound alarms in case of unclosed doors might prove to be more efficient.
- Consider the relevance of the rules to be established. Which is worse: the absence of formal regulations or the existence of regulations that cannot be followed because they are inappropriate?
- It takes time to set up a system of safety regulations, especially if the target groups are different.

Therefore do not try to accelerate the process of formation of new habits, but be consistent in analysing the current practices of the established routines and be ready to change them, if need arises.

- In the long-term perspective it is more reasonable to invest in separating the repository area, work staff and public area than maintaining organizationally or technically complicated access or control systems.
- Do not forget that the third rule of thermodynamics is still in force and that the essential feature of any system is the tendency to move towards chaos. The measures for keeping the stability of safety systems are not short-term projects; constant care should be taken of the processes.
- And finally, do not think that all the problems described above have been completely solved by now in the Estonian Historical Archives!

## Disaster Recovery Planning in the Estonian Historical Archives in 2000 - 2003 Chronology

<b>Period</b>	<b>Activities</b>
<b>2000</b>	
May	Series of lectures delivered by the specialists of the Estonian Rescue Board to archival staff (50 participants) about risk analysis and disaster recovery planning (12 hours).
August	Completion and introduction of the general concepts of disaster recovery planning, creating a disaster recovery plan.
October	Formation of the crisis management team in the Historical Archives
November	Completion of the risk analysis of the archival premises in the Historical Archives
<b>2001</b>	
April	Completion of the disaster recovery plan, modernization of evacuation plans.
October- November	Elementary level first-aid course Use of fire extinguishers, training.
Second half-year	Upgrading the safety equipment (absorbent pads, etc.) Upgrading the electricity system (separate systems for switching off electricity on different floors). Installation of evacuation lamps on evacuation routes
<b>2002</b>	
Second half-year	Installation of hazard symbols and standard equipment (fire extinguishers, extinguishing materials, transportation boxes, first-aid kits etc.) following all emergency requirements.
December	Staff training for required behaviour patterns in case of fire Amendments to the disaster recovery plan, approval of the new version.
<b>2003</b>	
Second half-year	Upgrading safety measures, modernization of signalisation systems, installing sound alarms on doors, amendments to access restrictions.
September	Evacuation training for archival staff and visitors

# Disaster Recovery Planning in Estonian Archives

by Ruth Tiidor,

Head of Preservation Department of the Estonian Historical Archives

In Estonia, preservation and protection of archives, which include requirements for disaster recovery planning, are stipulated by the Archives Act (enacted in 1998) and Archival Rules and Regulations (1999). According to the provisions of the Regulations, all public and private archival institutions, state agencies and local governments as well as legal bodies generate disaster recovery plans in order to avoid damage and destruction of public archives under their custody.

The disaster recovery plan provides the measures to protect, rescue and restore the archival records in case of emergency and to remedy the effects of the accident. Archives enforce the disaster recovery plan as an independent act; other institutions or persons can enforce disaster recovery plans both as independent acts or as part of any other act regulating the procedures of safety and rescue operations (e.g. emergency preparedness plan). Public and private archival institutions are obliged to obtain the National Archives approval for their disaster recovery plans. Obtaining approval entails evaluating the structure and contents of the disaster recovery plan and suggesting recommendations, if necessary.

In the National Archives the structural unit in charge of coordinating the disaster recovery planning is the Preservation Department of the Historical Archives. Since 1999, disaster recovery planning training sessions have been organised for the employees of the National Archives and other public archives as well as record creators. In cooperation with the Estonian Rescue Services a 12-hour risk analysis and disaster recovery planning training course was organised in the year 2000 for 50 employees of the National Archives. In the same year guidelines in Estonian for compiling

disaster recovery plans were issued on the National Archives website ([http://www.ra.ee/galahad/file\\_storage/2/43](http://www.ra.ee/galahad/file_storage/2/43)).

By now, thanks to the training courses and guidelines, disaster recovery plans have been compiled and approved in all archives under the supervision of the National Archives (the State Archives, the Historical Archives, the Film Archives and thirteen county archives). Because of reconstruction and relocation several archival institutions have already needed to supplement or amend the initial versions. Besides public archives, private archives have started to focus on disaster recovery planning and therefore there are only two archival institutions out of seven private archives operating in Estonia that have not obtained the approval yet. The disaster recovery plans of record creators are checked in the course of regular archival supervision and thus they do not need to receive approvals for their disaster recovery plans. Nevertheless, the Preservation Department of the National Archives has to share their expertise concerning the disaster recovery plans submitted by different institutions at least twenty-five times a year.

Thus a solid legal as well as practical foundation has been laid for efficient protection of the cultural objects preserved in the Estonian archives. The issues to be solved in the future are much more complicated – how to influence the attitudes and day-to-day decision-making procedures in archives and institutions and how to ensure the further development of the processes of increasing the safety of the archival records so that the disaster recovery plan would not be regarded as a pile of papers compiled just to satisfy the requirements.

## **Lutte contre les catastrophes : un point sur l'action engagée aux Archives historiques d'Estonie**

Le travail de sensibilisation et la mise en place de mesures destinées à minimiser les risques sont deux éléments essentiels du programme de lutte contre les catastrophes. Selon Indrek Kuuben, chef de la cellule en charge du plan d'urgence aux Archives historiques d'Estonie, s'il est primordial de créer les conditions favorables à l'élaboration du programme, ceci est aussi extrêmement difficile dans un contexte de changement politique.

Dans un établissement qui rassemble des archives, l'équipe de direction a pour mission principale d'assurer la conservation des documents tout en permettant leur consultation ; mais elle doit aussi avoir une connaissance approfondie du plan d'urgence. Malheureusement, on peut déplorer parfois une attitude passive face aux questions de sécurité qui consiste à considérer le programme de lutte contre les catastrophes comme un domaine d'activité distinct. Voilà pourquoi il paraît important de considérer la question d'un point de vue plus large et de poursuivre une réflexion qui engloberait non seulement les points théoriques mais aussi les aspects pratiques.

Il semble que le travail de sensibilisation effectué pendant la période d'élaboration du programme (environ deux ans, 2001-2003) ait, d'ores et déjà, porté ses fruits. Mais la formation des personnels aux opérations d'urgence (localisation des équipements de secours, exercices d'évacuation...) et aux comportements permettant de minimiser les risques au quotidien est également une action majeure du programme qui nécessite un investissement sur le long terme.

## **Lucha contra catástrofes: comentario acerca de la acción emprendida por los Archivos históricos de Estonia**

El trabajo de sensibilización y la puesta en práctica de medidas destinadas a minimizar los riesgos son dos elementos esenciales del programa de lucha contra catástrofes. Según Indrek Kuuben, jefe de la célula a cargo del plan de emergencia de los Archivos históricos de Estonia, aunque es primordial crear las condiciones favorables para la elaboración del programa, esto es también extremadamente difícil en un contexto de cambios políticos.

En un establecimiento que alberga archivos, el equipo gerencial tiene la misión principal de asegurar la conservación de documentos al mismo tiempo de permitir su consulta; pero debe igualmente tener un conocimiento profundo del plan de emergencia. Lamentablemente, algunas veces se puede criticar una actitud pasiva ante los problemas de seguridad que consiste en considerar el programa de lucha contra catástrofes como un campo de actividad distinto. Es por ello que parece importante considerar el aspecto de un punto de vista más amplio y buscar una reflexión que englobaría no sólo los puntos teóricos sino también los aspectos prácticos.

Aparentemente el trabajo de sensibilización efectuado durante el período de elaboración del programa (cerca de dos años 2001-2003) ya ha aportado sus frutos. Pero la capacitación del personal para realizar operaciones de emergencia (localización de equipos de seguridad, simulacros de evacuación, etc.) y mostrar conductas que permitan reducir al mínimo los riesgos cotidianos es igualmente una acción importante del programa que requiere una inversión a largo plazo.

# Cooperative Disaster Planning for Libraries: a Model



by Beverley Lashley  
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*NB: bibliographic references cited by the author can be found in page 33.*

## Introduction

Disaster planning in libraries is not a new phenomenon; however, the Florence floods of 1966 made libraries more aware of the need to develop disaster plans. The period in the United States in the mid to late 1980s was one of awareness with libraries focusing on preservation of their collections. Cooperation plays a fundamental role in libraries where individual organizations must interact for the overall system to function effectively. This paper will focus on the development of a cooperative plan and a common recovery strategy for several of the leading research libraries of New York. The eleven libraries that form the Comprehensive Research Libraries of New York are:

- Columbia University,
- Cornell University,
- University of Rochester,
- Syracuse University,
- New York Public Library,
- New York University,
- New York State Library,
- State University of New York (SUNY) Albany,
- SUNY Binghamton,
- SUNY Buffalo,
- SUNY Stony Brook.

The "Big Eleven" group was formed in 1985, and significant cooperative effort has resulted from funding awarded directly by New York State to foster the development of preservation programs. While every library in the group has detailed and comprehensive disaster recovery plans, there has not been a wholly concerted effort towards a cooperative approach. Yet the events of September 11, 2001 in New York City demonstrated

that catastrophic occurrences are often beyond the resources of any one institution.

## The New York State Landmark Library Omnibus Legislation of 1984

The State of New York has been a leader in providing information resources through its comprehensive research libraries that have added value and diversity to the economic and cultural development of the US. In 1984 the New York State Program for the Conservation/Preservation of Library Research Materials (NYS CPP) was established to coordinate preservation issues. New York State designated and funded eleven comprehensive research libraries within that state to "encourage the proper care and accessibility of research materials in the New York State and to assure the survival of important threatened research materials in some form" (*University at Buffalo Libraries Preservation Program Review*). The New York State Landmark Library Omnibus Legislation of 1984 provided the libraries at the universities of Columbia, Cornell, Rochester, Syracuse, New York University, State University of New York, SUNY Albany, SUNY Binghamton, SUNY Buffalo, and SUNY Stony Brook as well as the New York Public Library and the New York State Library with funding to establish and maintain their preservation programs. These eleven comprehensive libraries include five independent university libraries, four public university libraries, the State Library and USA's largest privately supported library.

New York State is the only state in the US that offers statutory grants for legislation for preservation issues. Therefore, this statutory grant is one of the most significant pieces of preservation legislation in the US for libraries as it offers these libraries some stability in funding. The Big 11 are now able to have a direct source of continued funding and the capacity for the development of their preservation program and the employment of full time preservation and conservation personnel.

Initially the state provided \$90,000 annually but this figure has gradually increased to \$126,000 for each library. Eligibility for this grant required the submission of a five-year plan and an annual program

budget. Subsequently, five-year plans have been submitted for each of three periods of five years. The plan should involve a coordinated set of activities and include "collection condition evaluation and preservation planning, environmental control, disaster prevention, preparedness and recovery" (*University at Buffalo Libraries Preservation Program Review*). The New York State Library's Division of Library Development administers this funding.

The value and resources of the collections of the Big 11 cannot be overstated. The collections of the Big 11 represent one of the most "significant aggregates" of collections in the United States totaling over ninety five million in volumes. The criteria for selection as a "comprehensive" research library included membership in the American Association of Research Libraries (ARL). In addition at that time, nine of the eleven libraries were members of the Research Libraries Group (RLG) with a grade five for their collections. The Conspectus is an analytical tool developed by the RLG in the early 1980s to describe the strength of the collections owned by its members in research libraries and these include the Library of Congress and the British Library. While Drummond and Munroe have identified libraries as having comprehensive collection based on "language, collection strength, acquisition commitment, and [the assignment of] collection goals... for division, category and subject." The rationale for the conspectus was that large academic libraries could share their resources based on their areas of collection strength. Preservation librarians still use the conspectus however for collection management, librarians use the American Librarian Association (ALA).

The study was undertaken with the aims and objectives to:

- identify the synergies of each library;
- identify the least cost in terms of time, resources and risk thus minimizing the loss of revenue and services offered due to unexpected disasters;
- provide defenses against the various types of disasters by adopting a common approach to emergency response and mutual aid agreements;
- provide maximum usage of the available resources, focusing on cost-effective solutions;
- develop detailed and documented steps that will be needed to recover from a disaster.

The study identified the current disaster response procedures within the institutions to be studied. The use of interviews, questionnaires and research

surveys to identify background information on each Preservation/Conservation Department, their strengths and weaknesses, their types of resources and collections and the benefits of devising a cooperative approach within the Big 11 have been incorporated in this study.

The research was undertaken between May–August 2003 and was based on the following:

- acquisition and analysis of the disaster plans of the Big 11;
- survey of the literature;
- interviews and visits to the site location and examination of the collections;
- requests for background information;
- preservation/conservation discussion group of the Big 11.

A review of the literature revealed that comparatively little research has been done on cooperative planning and disaster recovery strategies for libraries. Studies done in the US on disaster planning have revealed that many libraries still do not have disaster plans. A survey undertaken on state preparedness in Florida in 1987 showed that of the 183 academic and public libraries, only 50% had experienced incidents related to their collections in the previous five years and 79.6% did not have disaster plans (DePew).

With regards to cooperative disaster planning Cunha addressed the issue of regional disaster assistance teams. The thought here is that the "establishment of a Disaster Action Team... [is] feasible only in college and university libraries and larger public libraries in which there are a number of librarians and people from other administrative departments from which to draw the personnel and skills needed". Alire has given first-hand information about the flooding that affected Colorado State University in 1997. She states that "collaborating with internal and external groups, formally or informally, was going to be critical in the beginning stages of [their] disaster recovery efforts..." (Alire). She cites David Gillespie's *Partnership for Community Preparedness*, regarding it as the "most comprehensive bibliographic resource found on disaster recovery and collaboration." Wellheiser and Scott discuss cooperative planning and the formation of networks as part of the process of developing a disaster plan. Khan clearly states the importance of collaborating with agencies beyond the affected area, as this can prove beneficial during wide scale disasters. But all these authors have not developed a process for engaging in cooperative planning.

Various networks in the US have made formal arrangements in order to ensure that roles and functions are clearly understood in the event of a disaster. These include the 3R's – Research and Reference Library Resources Council, the Los Angeles Preservation Network, the Inland Empire Libraries Disaster Response Network (IELDRN), The California Preservation Program and the Bay Area Preservation Network (BAPNet). With the exception of the 3R's Council, what is noticeable is that all of these cooperative approaches are in the earthquake zones of California.

The National Disaster Task Force on Emergency Response was formed in 1995 by the Federal Emergency Response Management Agency (FEMA), the Getty Conservation Institute and the National Institute for the Conservation of Cultural Property (NIC). The members are committed to safeguarding the cultural heritage of the US from the effects of disaster while providing coordinated assistance to the general public. The Federal Emergency Response Management Agency (FEMA) will provide funding for a national, state or county-wide declared disaster. In 1995 the United Nations National Fire Protection Association issued *NFPA 1600-1995. Recommended Practice for Disaster Management*, the first national standard on disaster planning. The International Council on Monuments and Sites (ICOMOS) convened an international round table in 1992 with the main objective of examining how international agencies and organizations could improve their response to disasters. As a result of these deliberations a significant development occurred in 1996. The formation of the International Committee of the Blue Shield\* (ICBS) was formed by four major organizations – the International Council on Monuments and Sites (ICOMOS), The International Council on Archives (ICA), the International Council of Museums (ICOM) and the International Federation of Library Associations and Institutions (IFLA). The main purpose of this committee was to coordinate action in the case of an emergency. The program of ICBS is to develop at the national level, local resources for cultural emergencies and disasters.

\* Editor's note: the International Committee of the Blue Shield was set up in 1996 to work to protect cultural heritage threatened by wars and natural disasters. The Blue Shield is the symbol specified in the *Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict* (1954) for marking cultural sites to provide them with protection from attack in the event of armed conflict.

## **Cooperative Activities of the Big 11**

From the beginning, the Big 11 worked through a committee comprising representatives from all the different institutions. The libraries are also represented by an executive committee with the eleven divided into three groups based on size (Cornell and Columbia Universities and the New York Public Library are large libraries; the University of Rochester, Syracuse University, the New York University and the New York State are medium libraries, and the four SUNY's). A representative is selected from each group in the position of chair and these members form the executive committee. Since 1986 the state has provided additional funds for cooperative programs to avoid duplication of efforts that have involved two or more comprehensive research libraries.

Although these libraries have *ad hoc* agreements in terms of the use of facilities and resources, they also have individual disaster plans but limited financial and human resources. Therefore a joint cooperative plan is necessary to facilitate mutual agreements while at the same time sharing limited resources.

## **Overview of the Current Disaster Management Practices – the Big 11**

Semi-structured interviews were conducted with representatives from each library. The researcher visited libraries from each of the present grouping structure based on the size of their collections (large, medium and small size) to examine their collections and conservation practices. The questions asked varied depending on the answers of the respondents. The questions focused on the formulation of their disaster plans, collection management, training, disaster strategies and ideas about cooperative disaster planning. A disaster management matrix for the Big 11 was developed from the responses to the interview and the most striking revelations are that most of the libraries have self-insurance and have not conducted any recent risk assessment audits for the collection and all institutions would require the freeze drying services in the event of an emergency.

Preservation librarians initiated all the plans in this study. The findings revealed that the organizational structure of each institution and the lines of command clearly affect the procedures and response. Some of the organizations have to deal directly through risk management to make a claim and decisions, such as the hiring of a professional contractor. These plans have detailed instructions for risk management.

A risk hazard analysis was conducted by the researcher to ascertain the priority ratings of events that would affect the collection. The librarians were given four categories: terrorism, fire, water, and vandalism. The respondents were given the definitions for risk and vulnerability and were asked to select a specific percentage from a group of ranges. These figures were plugged into a formula.  $R \times V = C$  where R is risk, V is vulnerability, and C is criticality. Therefore  $R \times V$  would reflect how critically each collection would be affected by any of the above mentioned events and their ranked priority.

Some of the librarians had difficulty with determining an exact figure, as one felt "a little uncomfortable with the method of scoring as it misrepresents the actual levels of risk and vulnerability." The researcher recognized that the formula presented will result in subjective answers and is only a rough estimate of the risks and vulnerability of the collection to disastrous events. The results revealed that 66% of the respondents selected water-related events as priority number one, followed by fire, next was vandalism and terrorism was considered of least. Breighner however, believes that librarians in New York State should be concerned with terrorism. She noted that librarians in California should introduce strategies to cope with earthquakes, those in Florida with flooding and those in New York state with terrorism. Only two organizations in the study recognized that they would not be prepared for acts of terrorism and discussion could begin on this issue.

Listed below is a listing of the benefits to be derived and factors that will hinder the implementation of such a plan, these were created from the results of the interview.

### **Benefits to Be Derived from the Development of a Cooperative Plan for the Big 11**

The benefits to be derived from the development and implementation of a cooperative plan for the Big 11 outweighs the factors that will hinder it. The cooperative plan will enable the libraries to:

- engage in resource sharing. There is no need to reinvent the wheel and institutions can learn from the mistakes of others;
- enter into discussion with colleagues on similar issues. Discussion with colleagues keeps one abreast of topical issues in the field;

- utilize telecommunication facilities at the other Big 11;
- undertake joint training with each institution focusing on its area of expertise;
- have advance knowledge of who can assist during the recovery process, their roles and levels of responsibility;
- cultivate cross-fertilization of ideas across library types. The Big 11 includes both public and private libraries and this information sharing would be beneficial to all parties involved;
- provide emotional support which is key during a time of disturbance.

### **Factors that Will Hinder the Development of a Cooperative Plan for the Big 11**

Factors that will hinder cooperation in times of disaster can include:

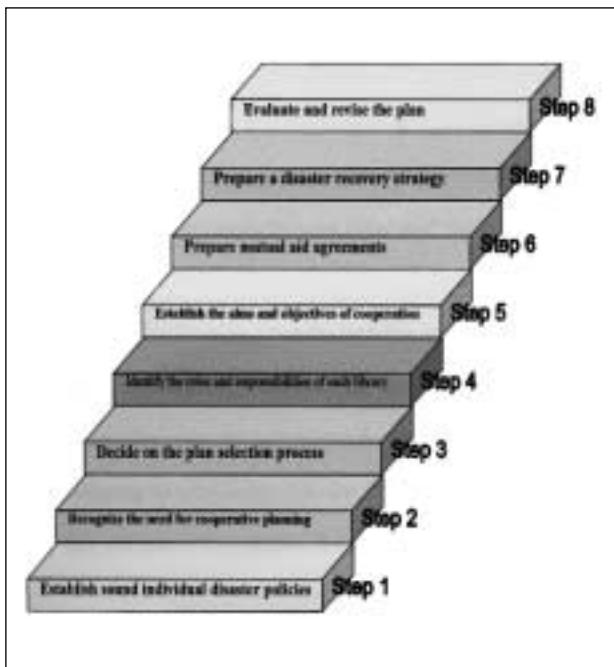
- the mix of different bureaucratic structures. The state bureaucracy would affect cooperation since some of the libraries can give assistance only to other state institutions. So it is the state versus non-state institutions.
- The distance between the libraries and geographic isolation could pose obstacles limiting resources available to other libraries.
- The legality of sending staff to other institutions, the Workers Compensation Act and union regulations coupled with the number of prescribed hours of work would have to be properly discussed.
- The development or the fine-tuning of a cooperative plan could prove tedious and would require hours of discussion.

### **Recommendations for the Development of a Cooperative Plan**

A cooperative disaster plan is not just one plan but the use of various plans; it takes into account each organization's particular vulnerabilities, strengths and resources. Cooperation has been a strategy embarked on by libraries to maximize their financial and human resources. A coordinated plan for the Big 11 will incorporate all the strengths of these individual plans and recommend strategies that are economically feasible. Preventive measures however are the most cost-effective phase in the development process of a disaster plan. The following basic steps are being proposed for the development of an effective cooperative disaster plan and recovery strategy.

## **Eight Basic Steps for Disaster Cooperative Planning and Recovery Strategy**

The figure below gives the eight basic steps that could be considered when devising a cooperative plan and recovery strategy.



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### **1. Establish Sound Individual Disaster Policies**

Although each institution in this study has developed disaster plans, what seems to be lacking is well-established individual strategies in the event of a major disaster. Proper individual planning has to take place before cooperative planning can become functional.

Close and cordial relationships have to be developed and maintained with key personnel. These include personnel responsible for purchases in the event of a disaster, risk management, facilities and the insurance company. Establishing relationships and agreements with departments on campus that have freezer facilities or with supermarket chains in close proximity to the institution is more practical before rather than during or after the disaster.

A risk assessment audit for each institution is also being recommended. O'Malley, Frisz and Breighner have addressed the issue of risk assessment from the value point of view. They state that "the first and most critical step in developing a risk assessment is determining the value of the asset" that of course will include the collection. Dorge and Jones have stated that one

should "evaluate the collection thoroughly to determine where the institution is vulnerable and what to do during an emergency". Although this may be time consuming, it can provide necessary data for insurance purposes. It would provide the librarian with data on assessing, identifying and evaluating the vulnerability of the libraries' facilities to emergency events and the impact they will have on the collection. A team consisting of the risk manager, the insurance company, representatives from the library and a consultant could form the risk assessment audit team. The librarian should play a major role as risk manager and should be able to identify, analyze and quantify the risks involved to the collection. The consultant could also act as an independent party and be asked to prepare an independent and objective survey of the risks, or to analyze the proposals that have been prepared by the risk assessment audit team. Any institution that is subjected to substantial risks can attempt to manage these through risk spreading techniques such as insurance.

Most of the libraries in this study are self-insured. Self-insurance means the parent institution will have to cover all losses in the event of a disaster. Cady regards insurance as an "important aspect of preserving library collections". Placing a value on the collection can become an overwhelming task, as there are various factors that will determine the selected insurance coverage. The collections in this study are not only valuable and rare but also irreplaceable, therefore costing will have to be based on how readily the items can be replaced or the recovery cost, i.e. the cost for conservation in the event of a disaster. One insurance manager recommended the usage of the actual cash value (ACV) as it takes into consideration the replacement cost and depreciation. According to Cady "the replacement value of library collections is by far, the single most influential factor" that will determine the insurance rate. But what if the item cannot be replaced – what next? Discussions of methods of valuing library collections can be found in the 1990 publication prepared by the National Association of College and University Business Officers (NACUBO) entitled *Financial Accounting and Reporting Manual for Higher Education*, and this is a useful resource tool for librarians. For most research collections, the focus must be on "recovery costs" rather than "replacement" costs, because of the high percentage of collections that are scarce or out of print. Much of the literature tends to stress replacement because most writers seem influenced by commercial insurance concerns. Replacement is, however valid for computers and other electronic equipment.

## **2. Recognize the Need for Cooperative Planning**

Librarians who will be venturing into a cooperative plan will first ask themselves if there is a need for joint planning for disaster management. The willingness of the librarians to cooperate is an integral element in the development of the plan. Meetings should be held in the preliminary stages to determine the ramifications of the plan and the willingness to cooperate. All librarians of the Big 11 agreed that there was a need for cooperative planning as it relates to disaster planning and response.

## **3. Decide on the Plan Selection Process**

A plan has been defined as one that has “a sequence of steps where a step is either an individual action; a joint action, a set of concurrent actions or a subgoal” (Griffiths, Luck). A cooperative plan can therefore take the form of a library performing an action on behalf of another library, or a group of the Big 11 performing an activity together or a set of activities performed at the same time. Cooperation becomes necessary when an institution alone cannot perform a particular goal. However, if there is a choice between plans that can be executed alone, then cooperation is optional. Therefore, for cooperation to take place, there must be an inherent advantage for the parties. With cooperation, however, comes the element of risk, as there is uncertainty of interaction.

When selecting the plan one has to determine who should be part of the group and why. In this case all the librarians had adequate background information on each other, they have adequate knowledge of each other's capabilities and preferences as well as the risk that would involve the other libraries. These libraries have revealed a level of trust and confidence with each other as they have already ventured into joint projects and discussion forums.

## **4. Identify the Role and Responsibility of each Library**

The specific role of each library in the event of a disaster should be clearly defined. The institutional differences outlined in the section on the background information on each library detailed their geographic and bureaucratic differences. The eleven institutions have already created a division of the libraries for committee and discussion purposes. This division can

be incorporated into this new plan, but might ensure that the leadership rotates among the different libraries. This will lead to greater participation by the members and help to cultivate a more aggressive and active approach towards cooperative planning for disaster management.

For response purposes, what is being proposed is the division of these institutions into two zones. The division into zones A and B was derived by ascertaining the distance and geographic terrain from one institution to the next. Zone A will consist of SUNY Buffalo, SUNY Binghamton and the university libraries of Cornell, Rochester and Syracuse. Zone B will consist of the New York State Library, the New York Public Library, SUNY Albany, SUNY Stony Brook, and the university libraries of Columbia and New York University. Each zone will have a regional mutual response team and its own disaster supply of stockpile.

The bureaucratic and union issues should be discussed and documented in the individual disaster plans. Librarians should try to negotiate the deployment of human resources in the event of a disaster.

The expertise of each library should be detailed and upgraded annually, especially due to staff changes. The part each library will play will depend on what it has to offer, and the cooperative plan should clearly state the type of assistance needed – technical, leadership or physical assistance.

## **5. Establish the Aims and Objectives of Cooperation**

Aims, objectives and mission statement could be developed for this group. This would provide the framework within which the group will function.

## **6. Prepare Mutual Aid Agreements**

The mutual aid agreement could include joint operational activities designed for the benefit of the entire group. Activities could include the development of a web site, purchasing of stocks of emergency supplies and equipment, provision of multiple storage facilities, production of a collection management listing, identify and implement appropriate training programs, development of a directory database, individual libraries facilitating a command post for communication purposes, securing joint funding sharing of disaster plans.

## **7. Prepare a Disaster Recovery Strategy**

In the event of a disaster, one has to develop an initial response strategy based on the specific emergency. The type of disaster will affect the strategy employed and libraries usually have a priority recovery checklist included in their disaster plans. If there is a fire in the audiovisual collection, then the librarian would organize the disaster recovery team and use the skills of the librarian from the Big 11 who can best address this issue.

The collection listing would be consulted and the interlibrary loan acquisition of lost issues would be explored to ensure that the clients encounter less discomfort during the recovery period.

A command communication post could be activated to ensure that the general public is aware of the situation and this post can be used as a means to secure assistance.

## **8. Evaluate and Revise the Plan**

Ideally the plan should be evaluated and updated whenever it becomes necessary and could become the responsibility of the organization that hosts the chair each year. The plan should be updated to reflect any possible changes in administration, the collections, buildings and equipment, personnel, suppliers, technology and legislation.

## **Conclusion**

The aim of this research paper was to provide a framework within which comprehensive research libraries in the New York State could operate in the event of a major disaster. The study has revealed that cooperative planning is an issue being addressed by the Big 11; however, for effective cooperation to take place these individual libraries need to develop individual, effective disaster recovery processes that can assist in creating defenses against large to wide scale disasters. All the libraries have been faced with water related emergencies and have in place disaster plans that detail the action to be taken in the event of a disaster. Fortunately these institutions have been provided with secure funding by New York State for preservation activities, but few of these agencies have focused on utilizing the funds on disaster related projects. Only five of the libraries in this study have freezer facilities that could stabilize a small-scale

disaster. Recent power failure demonstrated that some of the libraries needed generators. This implies that most of the libraries are still not prepared in practical sense if a disaster should occur. If these librarians want to be regarded as the "keepers of information," then discussion needs to begin almost immediately on the process to implement cooperative planning and the way forward. All the libraries have preservation programmes but if proper systems are not developed as to jointly safeguard these materials from disaster related events, then risks will greatly increase.

Discussion of cooperative planning for disaster management has not been explored by researchers in the field as they tend to focus on developing recovery plans, training employees in recovery methods and salvaging techniques. Little information is available on the process and case studies need to be developed that emphasize the process and effectiveness of cooperative planning. What is clear is that cooperative planning is a vital factor in the disaster response and planning process.

The study was limited to analyzing disaster plans as most of the libraries had not conducted risk assessment audits and could not provide documented reports on the types of emergencies and how they were handled. The researcher therefore could not determine the true collection - which ones to recover, which could be replaced, etc. Risk assessment audits is an area that could be addressed through the usage of state funding so that the libraries can have a clearer idea of their recovery and replacement costs.

An agenda for future action plan in the Caribbean can be developed and addressed by institutions such as the Caribbean Disaster Information Network, that is housed at the University of the West Indies, Mona Campus, Jamaica. The Caribbean as a region is prone to natural disasters over the years, and could maximize usage of limited resources by implementing this model. These Caribbean islands are relatively small compared to New York State and so the model can be easily modified and introduced into the Caribbean to make libraries less vulnerable to the many risks they face and allow them to continue their operation as the custodians of cultural and historical literature.

## Bibliography

- Alire, Carmen, ed. Library Disaster Planning and Recovery Handbook. New York: Neal-Schuman Pub Inc., 2003.
- Cady, Susan A. "Insuring the Academic Library Collection." The Journal of Academic Librarianship. 25. 3 May 1999. 211-215.
- Cunha, George Martin and Dorothy Grant Cunha. Library and Archives Conservation: 1980s and Beyond. Vol 1. Metuchen, NJ: the Scarecrow Press, Inc., 1983.
- DePew, John N. Statewide Disaster Preparedness and Recovery Program for Florida Libraries. Occasional Papers No. 185. Illinois: University of Illinois, Graduate School of Library and Information Science, 1989.
- Dorge, Valrie and Sharon L. Jones comps. Building an Emergency Plan: A Guide for Museums and their Cultural Institutions. Los Angeles: The Getty Conservation Institute, 1999.
- Drummond, Rebecca C., and Mary H. Munroe. "Including Access in Conspectus Methodology." Advances in Collection Development and Resources Management. 2 (1996): 63-79.
- Griffiths, Nathan and Michael Luck. Cooperative Plan Selection Through Trust.  
<http://www.ecs.soton.ac.uk/~mml/papers/maamaw99.pdf>
- Khan, Miriam. Disaster Response and Planning for Libraries. 2<sup>nd</sup> ed. USA: ALA, 2003.
- O'Malley, Michael, Michael L. Frisz and Mary Breighner. "Libraries Affected by Rise in Catastrophic Occurrences." URMIA Journal. 2.1 Sept. 1995. 10-15.
- Wellheiser, Johanna and Scott, Jude, eds. An Ounce of Prevention: Integrated Disaster Planning for Archives, Libraries, and Records Centres. 2<sup>nd</sup> ed. Maryland: Canadian Archives Foundation, 2002.

### Plans d'urgence : propositions pour un programme de coopération

Le milieu des années 80 a correspondu aux Etats-Unis à une période de prise de conscience en matière de conservation des documents. C'est dans ce contexte que, en 1984, onze bibliothèques de recherche ont été choisies et subventionnées par l'Etat de New York pour mener conjointement un programme de conservation.

De mai à août 2003, une étude a été menée afin d'identifier les procédures actuellement en place pour lutter contre les catastrophes. Elle révèle les nombreux avantages d'un programme de coopération : partage des ressources, échange d'idées et d'informations, formations communes dispensées par les institutions partenaires, chacune dans son domaine d'excellence... Malheureusement, des structures administratives hétérogènes ou la distance entre les établissements peuvent aussi représenter des obstacles.

Beverley Lashley évoque ici les huit étapes qu'elle considère comme indispensables à la mise en place d'un programme de coopération en matière de plans d'urgence. Selon elle, il faut successivement :

- que chaque établissement définit ses propres procédures d'urgence ;
- que chaque établissement affirme sa volonté de s'investir dans un programme de coopération ;
- décider d'un processus de sélection des établissements partenaires ;
- identifier le rôle et la responsabilité de chaque bibliothèque ;
- définir des objectifs ;
- établir des accords de partenariat ;
- définir une stratégie à suivre lors de la remise en état ;
- évaluer et remettre le plan à jour.

L'auteur conclut en précisant qu'une coopération efficace repose sur l'investissement de chacun des établissements et sur un travail de prévention qui doit être mené au sens pratique du terme.

### Planes de emergencia: propuestas para un programa de cooperación

La mitad de los años ochenta correspondió en los Estados Unidos a un período de toma de conciencia en materia de conservación de documentos. Es en este contexto que, en 1984, once bibliotecas de investigación fueron seleccionadas y subvencionadas por el Estado de Nueva York para llevar conjuntamente un programa de conservación.

Desde mayo hasta agosto de 2003, se realizó un estudio para identificar los procedimientos que actualmente se aplican para luchar contra las catástrofes. Este estudio reveló las numerosas ventajas de un programa de cooperación: compartir los recursos, intercambiar ideas e información, programas comunes de capacitación para las instituciones asociadas, cada una dentro de su campo de excelencia... Lamentablemente, la existencia de estructuras administrativas distintas o la distancia entre las instituciones pueden también representar obstáculos.

Beverley Lashley evoca aquí las ocho etapas que considera indispensables para la puesta en práctica de un programa de cooperación en materia de planes de emergencia. Según ella, es necesario sucesivamente:

- que cada establecimiento defina sus propios procedimientos de emergencia;
- que cada establecimiento afirme su voluntad de invertir en un programa de cooperación;
- decidir un proceso de selección de las instituciones asociadas;
- identificar el papel y la responsabilidad de cada biblioteca;
- definir los objetivos;
- establecer acuerdos de asociación;
- definir una estrategia a seguir después de la revisión;
- evaluar y actualizar el plan.

La autora concluyó precisando que una cooperación eficaz se basa en la inversión de cada uno de las instituciones y sobre un trabajo de prevención que debe llevarse a cabo en el sentido práctico del término.

# News

from Blue Shield

## Comité Français du Bouclier Bleu 1<sup>re</sup> journée d'étude

La première journée d'étude du Comité Français du Bouclier Bleu a eu lieu le 28 novembre 2003 à Caen à l'initiative de l'association « Normandie-Patrimoine » et du Conseil Régional de Basse-Normandie. Journée très réussie qui a rassemblé plus de 136 participants.

Au programme, études de cas : incendie du Parlement de Rennes et du Château de Lunéville, présentation du plan de prévention des risques dans le Val d'Oise, description du système d'information géographique dédié à la préservation du patrimoine de Basse-Normandie, risques d'inondation dans le Bassin de la Loire.

La présence des politiques, maires, préfets ou Président de Conseil Général et celle des représentants de l'armée ou des pompiers, ont permis de souligner la nécessité et l'intérêt de stratégies transversales dans la prévention des risques.



environmental assessment and control; enclosure materials and housing; cold storage; emergency planning, response, salvage, and recovery.

The workshop was one in a series funded by The Andrew W. Mellon Foundation to further knowledge and expertise in the preservation and treatment of photographs.

Over seventy people from across the globe attended the workshop including conservators, curators, librarians, archivists, and collection managers. Each speaker emphasized the vulnerabilities and needs of photographic materials in relation to preservation activities and their practical implementation within an institutional setting. In addition to lectures, the workshop included discussions, demonstrations, and group activities, such as a tabletop exercise in emergency salvage and recovery.

James Reilly of the Image Permanence Institute, Rochester Institute of Technology (IPI), discussed the hazards of a "normal environment" for photographic materials. Various assessment tools were reviewed, with an emphasis on the intricacies of data collection, analysis, and reporting. Peter Herzog of Herzog-Wheeler described the principles behind heating and cooling various types of

buildings as well as how HVAC systems function in these buildings. Both speakers focused on how to maximize environmental capability of the institution while balancing budgetary concerns.

Jean-Louis Bigourdan of IPI discussed enclosure materials and design, as well as the effect of enclosures on RH and temperature equilibration. He described how to coordinate the various macro- and micro-climates in collection areas.

Constance McCabe of the National Gallery of Art, Sarah Wagner, and Andrew Robb of the Library of Congress discussed freezer and vault cold storage and practical implementation of these cold storage methods to suit a variety of collection needs.

Gregory Hill of the National Archives of Canada, Robin Siegel of the National Geographic Society, and Andrew Robb led a session on emergency preparedness and response, covering case studies, research, types of emergency structures, and the use of various freezing options. These presentations and other associated materials from preparation for the workshop will be accessible from the Preservation Directorate's website at: <http://www.loc.gov/preserv/>

# News

from PAC

## Library of Congress Holds Workshop on Photograph Preservation

Report by Andrew Robb,  
Senior Photograph Conservator,  
Library of Congress

On September 8<sup>th</sup>-10<sup>th</sup>, 2003, the Library of Congress (USA) Preservation Directorate hosted a workshop entitled "Photographs and Preventive Conservation: Theory, Practice, and Implementation". The workshop focused on four crucial areas:



Andrew Robb, Sarah Wagner, and Constance McCabe lead a discussion concerning the advantages and disadvantages of various options for the cold storage of photographs.

## **Workshop on Earthquakes, Mexico, 16-17 October, 2003**

Report by Marie-Thérèse Varlamoff,  
IFLA-PAC Director

As a follow-up of the Open Session (Glasgow 2002) on the Blue Shield and of the Pre-Seminar on disasters (Berlin 2003), IFLA Core Activity on Preservation and Conservation (PAC) has decided to organise a series of workshops on the subject in the Latin American and Caribbean area.

The first workshop took place in Mexico City, October 16-17, 2003 and was co-organised by PAC and the Universidad Nacional Autonoma de Mexico (UNAM) with the support of CLIR (Council on Library and Information Resources). The workshop dealt with earthquakes.

Around 100 Mexican participants from the cultural arena (libraries, archives, museums) and from the civil society and rescue services attended the four sessions in which case studies about recent earthquakes were presented.

Speakers came from Mexico, France, Venezuela and the United States. Lectures on the assessment of the risks threatening Mexico as well as recommendations and advice on the preventive measures already taken or to be taken to mitigate the damages completed the programme. The participation of speakers from the civil society and of an architect, a seismologist and a psychologist was certainly a plus, very much appreciated by the audience.

The workshop was considered by all participants as a success and will serve as a model for future workshops. The next one will take place in Trinidad & Tobago, on May 21-22, 2004 and will focus on natural disasters in general. It is co-organised by PAC, the National Library of Trinidad & Tobago and the Association of Caribbean University, Research and Institutional Libraries (ACURIL).

More information will be available later, on the IFLA website and in "International Preservation News".

## **Taller sobre terremotos, México, 16-17 de octubre de 2003**

Informe de Marie-Thérèse Varlamoff,  
Director de IFLA-PAC

Como continuación de la Sesión Abierta (Glasgow 2002) sobre el Escudo Azul y el Pre-Seminario sobre desastres (Berlín 2003), el IFLA Core Activity on Preservation and Conservation (PAC) decidió organizar una serie de talleres sobre esta materia en el régión de América Latina y el Caribe.

El primer taller se realizó en Ciudad de México, entre el 16 y 17 de octubre de 2003 y fue organizado conjuntamente por el PAC y la Universidad Autónoma de México (UNAM) con el apoyo del CLIR (Council on Library and Information Resources).

El tema del taller fue los terremotos. Asistieron ponentes de México, Francia, Venezuela y los Estados Unidos. El programa se complementó con ponencias sobre la evaluación de los riesgos que amenazan México, así como recomendaciones y asesoría sobre las medidas preventivas ya adoptadas o a adoptar para mitigar los daños. La participación de ponentes de la sociedad civil y de un arquitecto, un sismólogo y un sicólogo fue ciertamente una ventaja, muy apreciada por la audiencia.

El taller fue considerado un éxito por todos los participantes y servirá como modelo para futuros talleres. El próximo tendrá lugar en Trinidad & Tobago, del 21 al 22 de mayo de 2004 y se centrará en los desastres naturales en general. El mismo es organizado conjuntamente por PAC, la National Library of Trinidad & Tobago y la Association of Caribbean University, Research and Institutional Libraries (ACURIL).

Posteriormente, se ofrecerá mayor información en el sitio web de la IFLA y en la publicación "International Preservation News".

## **Preservation of Archives in Tropical Climates**

Report by Marie-Thérèse Varlamoff  
IFLA-PAC Director

The Second International Conference on the Preservation of Archives in Tropical Climates was organised in Curaçao, 17-21 November, 2003, in cooperation with the National Archives of Curaçao and the National Archives of the Netherlands with the support of the International Council of Archives. 139 participants from 17 countries attended. Numerous themes were presented, always in the light of the specific climatic conditions in the tropical area. It is interesting to note that whatever the theme:

- decay of paper-based collections,
- photographic collections,
- preservation management,
- low-cost buildings,
- cooperative projects for preventive conservation,
- IPM (Integrated Pest Management),
- disaster planning,

all the papers could concern libraries as well as archives. This confirms that preservation problems are most of the time identical.

At the end of the meeting, seven resolutions were presented, among which the development of disaster control plans for all national archives in tropical countries in response to, and as appropriate in conjunction with the resolutions passed at the IFLA Conference in 2003. Another resolution promoted the development of further preservation workshop in conjunction with ICCROM and any other willing partner with particular emphasis on the problems caused to archives by tropical climates.

## **Translation**

« IFLA Principles for the Care and Handling of Library Material » have been translated into Greek.

For more information, please contact:  
Evagelia Semertzaki  
Bank of Greece Library  
21 Panepistimiou Ave.  
10250 Athens  
Greece  
Tel: (30) 210 320 2446  
e-mail: esemertzaki@bankofgreece.gr

## Reminder

As announced in "International Preservation News n° 29", the IFLA Section on Newspapers together with IFLA-PAC decided in June 2003 to take up again the "JICPA Survey on the Safeguard of Newspapers and Periodicals in Africa" which was conducted by IFLA-PAC in 2001. The Section limited the new survey to newspapers only, published in Africa (retrospective holdings as well as current files). The newspaper is by definition an ephemeral item which is normally printed on poor oversize paper with poor ink, whose preservation is precarious. In most cases holdings need restoration and/or transfer to another medium. In this regard the Section wants to locate and know about holdings of African newspapers kept in Africa in national or university libraries as well as in national archives.

Last July, a simplified query form, a single sheet in English or French was mailed electronically or by fax to the person involved in each institution (more than one hundred letters were dispatched). The query form is also mounted on IFLANET (<http://www.ifla.org/VII/s39/pr1/qstn03-e.htm>) and was announced in the Section's "Newsletter", so as to reach a large number of professionals concerned by newspapers. To date the Newspaper Section has received round 15 replies but does expect many more. **The very last deadline for replies being 31 January, 2004**, a reminder has been circulated in November.

Thanks to precise replies the IFLA Section on Newspapers should be able to list holdings, possible gaps, equipment needs, microfilm and/or digitisation needs, in order to work out priority actions and funding requirements. It is therefore urgent that African colleagues involved should provide as complete replies as possible in time.

Else Delaunay  
IFLA Section on Newspapers

## Rappel

Comme annoncé dans « International Preservation News, n° 29 », la Section IFLA des Journaux en collaboration avec IFLA-PAC a décidé en juin 2003 de reprendre l'« Enquête sur la conservation des journaux et des périodiques en Afrique », lancée en 2001 par IFLA-PAC.

La Section a limité la nouvelle enquête aux seuls journaux publiés en Afrique (collections rétrospectives ou courantes). Le journal étant de par sa définition un document éphémère, il est généralement publié sur du papier pauvre, de grand format, avec une encre médiocre. Sa conservation est précaire. Il est donc urgent de sauvegarder les fonds de journaux, notamment par le transfert sur un nouveau support, de préférence sans restauration coûteuse au préalable. Pour cela, il est indispensable de connaître les collections de journaux africains conservées en Afrique dans les bibliothèques nationales ou universitaires de même qu'aux archives nationales.

En juillet dernier, un questionnaire simplifié, une feuille recto-verso contenant le formulaire en anglais ou en français fut adressé par voie électronique ou par fax à la personne concernée dans chaque institution. Il a également été monté sur IFLANET (<http://www.ifla.org/VII/s39/pr1/qstn03-e.htm>) et annoncé dans le « Bulletin » de la Section afin d'atteindre le plus grand nombre de professionnels intéressés. A ce jour, la Section des Journaux a reçu environ 15 réponses mais elle espère évidemment en recevoir beaucoup plus. **La date butoir pour remettre les réponses ayant été reportée au 31 janvier 2004**, une lettre de rappel a été diffusée en novembre.

Grâce à des réponses précises la Section des Journaux sera en mesure de dresser la liste des collections existantes, des lacunes éventuelles, des besoins en matériels, en microfilm et/ou numérisation, et d'établir des priorités quant aux actions à entreprendre et aux aides à solliciter. Par conséquent, il est impératif que les collègues africains répondent au questionnaire dans les temps, en fournissant des informations aussi complètes que possible.

Else Delaunay  
Section IFLA des Journaux



## Publications

### To Preserve and Protect

*The Strategic Stewardship of Cultural Resources*

Library of Congress

Washington,

2002



Our treasures from the past and today's digital resources are part of the cultural assets that must be preserved for future generations and at the same time made available to new and wider audiences.

In museums, libraries and other cultural institutions, physical security and preservation of the collections are closely linked; but what are the most effective tools for preservation? The essential elements of a security program?

This book, which gathers the essays from the symposium held at the Library of Congress October 30-31, 2000, explores the connections between preservation and security of collections and presents some of the issues involved in the stewardship of our cultural heritage.

300p.

ISBN: 0-8444-1060-8

For sale by:

The Superintendent of Documents

U.S. Government Printing Office

Stop SSOP, Washington,

DC 20402-0001 USA

Tel: toll free (866) 512-1800

Fax: (202) 512-2250

**Book and Paper  
Conservation  
Proceedings**  
Ljubljana 1997  
Edited by  
Jedert Vodopivec  
and Nataša Golob



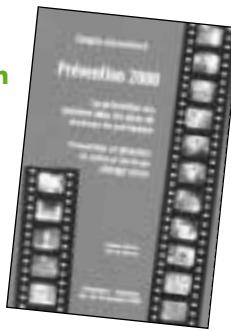
From 3<sup>rd</sup> to 5<sup>th</sup> July 1996, an international symposium entitled "Book and Paper Conservation" was held in Ljubljana (Slovenia). It gathered archivists, librarians, restorators, conservators, chemists as well as specialists on photographic technologies, experts on ancient bindings, historians or paleographers, who focused on problems caused by the ageing of ancient and recent materials, and exchanged experiences. Numerous papers were included in the proceedings which deal for instance with:

- the organisation of the preservation of cultural heritage in archives and libraries;
- the classification of damaged or endangered material;
- the research of different kinds of bindings.

The symposium was held simultaneously with an exhibition which aimed at presenting how works of art are deteriorating around us, damage being caused by force majeure, negligence, ignorance or use of poor materials. The catalogue of the exhibition and the proceedings of the symposium have been published in a bilingual (Slovene-English) edition.

For more information,  
please contact:  
Dr. Jedert Vodopivec  
Archives of the Republic of Slovenia  
Zvezdarska 1.P.P.21  
1127 Ljubljana  
Slovenia  
E-mail: Jedert.Vodopivec@gov.si

**Prévention  
2000**  
édité par  
Jacques  
Rebière  
et William  
Mourey



## **Book Reviews**

### **Stratégie de stockage du patrimoine et prévention incendie**

Draguignan –  
23 février 1999  
Journée  
d'étude  
sous le  
parrainage de  
la Direction  
Régionale  
des  
Affaires Culturelles,  
Provence – Alpes – Côte d'Azur  
Textes réunis par Jacques Rebière.



Les Actes de la journée d'étude "Stratégie de stockage du patrimoine et prévention incendie" ont été récemment publiés. Organisée par le Centre archéologique du Var, parrainée par la Direction Régionale des Affaires Culturelles, Provence - Alpes - Côte d'Azur et le Comité Français du Bouclier Bleu, cette manifestation a rassemblé le 23 février 1999 à Draguignan, des conservateurs, des conservateurs-restaurateurs et des pompiers, tous venus expliquer leur démarche mais aussi les contraintes liées à leur profession. L'objectif de cette journée était de trouver des solutions acceptables par tous qui répondraient tant à la logique des professionnels de la conservation qu'à celle des secouristes.

Les Actes de cette journée comprennent trois parties. La première rassemble des textes ayant pour objet la "situation des réserves des musées de la région PACA" ; la seconde évoque plus précisément le point de vue des conservateurs-restaurateurs en matière de contraintes techniques. La troisième enfin, plus générale, met l'accent sur les dispositions législatives appliquées aux musées et à leurs réserves.

Les différents cas étudiés ici, celui du Musée d'histoire ou de la Vieille Charité à Marseille, celui du Musée archéologique d'Antibes, révèlent un manque d'intérêt pour la notion de réserve. En effet, il est très rare que des réserves soient spécialement conçues pour abriter des collections patrimoniales et souvent, ce sont des bâtiments historiques qui sont affectés à cet usage, avec les problèmes de conservation et de sécurité que cela suppose. Lorsqu'il s'agit de constructions modernes, comme le Musée d'histoire de Marseille par exemple, aménagé dans un centre commercial, c'est l'absence de concertation entre architectes et équipe de conservation qui peut donner lieu à une infrastructure inappropriée.

Afin de répondre au mieux à une situation d'urgence, il est donc indispensable de connaître parfaitement l'état des collections pour évaluer les risques et de mettre au point les dispositifs adéquats en fonction des situations, du type de collection, de bâtiment. Il est également primordial que professionnels de l'incendie et conservateurs-restaurateurs puissent définir ensemble une stratégie destinée à protéger à la fois les personnes et les biens.

Des dispositions réglementaires existent en matière de sécurité contre l'incendie. Elles évoluent à la suite de sinistres meurtriers comme celui des Nouvelles Galeries de Marseille (1938) qui a donné lieu au décret du 7 février 1941, premier texte réglementaire en la matière.

Ces règles de prévention sont inspirées pour la plupart du Code de la Construction et de l'Habitation, du Code de l'Urbanisme, du Code du Travail. Mais si ces dispositions sont applicables aux musées, la notion de réserve semble être encore insuffisamment prise en compte dans la réflexion qui est menée ; or, la réserve est un local à risques importants, ne serait-ce que par les matériaux de conditionnement qu'elle contient. C'est ce qu'ont souhaité souligner les intervenants de cette journée d'étude qui a trouvé son prolongement dans un congrès international, en novembre 2000 (voir page 37).

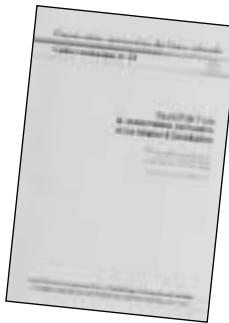
96p.

ISBN : 2-905757-00-0

Cette publication est disponible gratuitement auprès de : Laboratoire de conservation, restauration et recherches 19, rue Mireur 83300 Draguignan - France

## **Au péril de l'eau, la conservation préventive et les risques d'inondation**

VII<sup>e</sup> journées-débats,  
organisées  
par le DESS  
de conser-  
vation  
préventive  
de  
l'université  
Paris-I,  
sous la  
direction de  
Denis Guillemand  
Paris, 11 et 12 avril 2002



L'Association des restaurateurs d'art et d'archéologie de formation universitaire (ARAAFU) a édité le dixième numéro de ses cahiers techniques, intitulé "Au péril de l'eau, la conservation préventive et les risques d'inondation". Cette brochure rassemble les différentes communications présentées sur ce thème lors des VII<sup>e</sup> journées-débats organisées par le DESS de conservation préventive de l'université Paris-I. A l'issue de chaque texte, on trouvera une page de "débats", qui répertorie quelques échanges suscités par l'intervention.

Lors de ces deux journées, universitaires, chercheurs, conservateurs, ont pris comme objet d'étude cet élément à la fois familier et potentiellement dévastateur que représente l'eau. Réflexion essentielle dans un contexte climatique troublé où les éléments semblent se déchaîner avec une rare violence. Plusieurs cas concrets sont exposés ici, parmi lesquels l'inondation de Florence en 1966, qui posent de multiples questions.

Face à un phénomène qui se déclenche de façon aussi inattendue, comment réagir ? Comment tirer ensuite des leçons d'un événement aussi dramatique et mettre en place des mesures préventives afin d'empêcher qu'il ne se reproduise ? Question qui porte en elle une réflexion plus large sur l'importance de la mémoire, de celle qui constitue l'information historique bien-sûr, mais aussi de la mémoire collective. Ainsi, ce sont bien les enseignements tirés des inondations successives qui ont frappé Grenoble

entre la fin du XVI<sup>e</sup> et le milieu du XIX<sup>e</sup> siècle qui ont induit le développement de mesures préventives, de dispositifs de secours, d'alerte et de prévision. Pour lutter contre ces inondations, de grands ouvrages ont en outre été construits qui ont contribué à redessiner le paysage urbain.

Dans tous les cas, c'est bien le terme de prévention qui semble avoir été le maître-mot de ces journées. Quelles mesures prendre donc pour anticiper la catastrophe et y faire face ? La mise en place de plans d'urgence, outils indispensables à l'heure où des établissements sont encore conçus sans que la question de l'eau ne soit forcément étudiée, est l'une des réponses à cette question.

74p.

ISBN : 2-907465-12-0

Cette publication est disponible auprès de : Association des restaurateurs d'art et d'archéologie de formation universitaire (ARAAFU)  
11, boulevard de Reuilly  
75012 Paris - France  
Tél./Fax: 33 (0) 1 44 87 01 59



## **Events and Training**

### **Collaboration and Connections**

3<sup>rd</sup> AICCM Book, Paper and Photographic Materials Symposium  
April 1<sup>st</sup>-3<sup>rd</sup>, 2004  
Sydney (Australia)

The programme, including speaker profiles, abstracts, posters, workshops, events and registration details will be available on both the Art Gallery New South Wales and Australian Institute for the Conservation of Cultural Material (AICCM) websites from December 2003.

The two keynote speakers are Bea Maddock (1st April) and Peter Bower (2<sup>nd</sup> April).

Bea Maddock is one of Australia's most eminent artists who has consistently engaged with paper, books and printmaking and is presently working with curators and conservators at the Launceston Museum and Art Gallery to produce a "catalogue raisonné". Conservator Linda Black will also speak of the collaboration in bringing this project about.

Peter Bower is a leading British forensic paper historian and analyst, specialising in the examination of paper for the purposes of dating, attribution and usage. He will give a series of lectures and workshops in Sydney and Melbourne.

Other notable speakers include Dr. Sydney Shep, Senior Lecturer in Print & Book Culture at Victoria University of Wellington and Professor Jeffrey Shaw who is the Executive Director, Cinema Centre for Interactive Cinema Research. A scheduled panel session chaired by Detlev Lueth will provide an overview of institutional directions in reformatting collections. Presentation topics include investigations by conservators, historians, archivists and framers into art, photographic and print media.

This symposium promises to be a fascinating exploration of the past as we rapidly embrace a digital future.

For more information, please contact, Rose Peel, convenor, at:  
rosep@ag.nsw.gov.au

## Training Courses

Centre for Photographic Conservation  
London (United Kingdom)

The year April 2004 - April 2005 will see the final programme of professional development courses to be offered by the Centre for Photographic Conservation. The Centre responding to the needs of fellow professionals will offer the following programme of courses and workshops on aspects of the preservation and conservation of historic photographs.

- Preservation and Conservation of Photographic Materials  
3<sup>rd</sup> May-18<sup>th</sup> June 2004 or  
4<sup>th</sup> Oct.-19<sup>th</sup> Nov. 2004
- The Identification of Photographic Processes  
10<sup>th</sup>-12<sup>th</sup> May 2004 or  
11<sup>th</sup>-13<sup>th</sup> Oct. 2004

- Advanced Photographic Conservation Techniques  
30<sup>th</sup> August-24<sup>th</sup> Sept. 2004
- Rediscovering Historic Photographic Processes  
3<sup>rd</sup>-7<sup>th</sup> May 2004 or  
4<sup>th</sup>-8<sup>th</sup> Oct. 2004
- Preservation and Conservation of Albums and Photographically Illustrated Printed Books  
8<sup>th</sup>-10<sup>th</sup> March 2004
- Preservation of Colour Photographic Materials  
1<sup>st</sup>-2<sup>nd</sup> March 2004 or  
28<sup>th</sup> Feb.-1<sup>st</sup> March 2005
- Preservation of Photographic Negatives: Glass, Nitrate, Acetate and Polyester Sheet and Roll Film Systems  
26<sup>th</sup>-27<sup>th</sup> Feb. 2004, 13<sup>th</sup>-14<sup>th</sup> May 2004, 14<sup>th</sup>-15<sup>th</sup> Oct. 2004 or  
24<sup>th</sup>-25<sup>th</sup> Feb. 2005
- Storage Environments, Systems and Materials for Photographic Albums, Prints, Glass and Plastic Negatives and Positives  
3<sup>rd</sup>-5<sup>th</sup> March 2004 or  
2<sup>nd</sup>-4<sup>th</sup> March 2005

For more information:  
<http://www.cpc.moor.dial.pipex.com/>  
Tel: 44 (0) 20 8690 3678  
Fax: 44 (0) 20 8314 1940  
e-mail: xfa59@dial.pipex.com

Centre de Conservation du Livre  
18, rue de la Calade  
13200 Arles  
Tél : (33) 0 4 90 49 99 89  
Fax : (33) 0 4 90 49 66 11

## Digital Preservation Management:

*Implementing Short-term Strategies for Long-term Problems*

Workshop  
May 10<sup>th</sup>-14<sup>th</sup>, July 19<sup>th</sup>-23<sup>rd</sup> or  
November 1<sup>st</sup>-5<sup>th</sup> 2004  
Ithaca (United States)

Cornell University Library is offering an innovative new digital preservation training program that will consist of an on-line tutorial and a series of one-week workshops to be held in Ithaca, NY. The primary goal of this program is to enable effective decision making for administrators who will be responsible for the longevity of digital objects in an age of technological uncertainty. The on-line tutorial will be a pre-requisite to the workshop, but will also be publicly accessible as a stand-alone tool. Workshop attendees will participate in an interactive process to develop digital preservation plans that incorporate technical, financial, organizational, and policy aspects encompassing the full life cycle of digital objects. The workshop will include presentations, group discussions, labs, individual assignments, and a keynote presentation by an international expert in digital preservation. Issues to be covered include:

- program planning, management, and evaluation
- risk assessment
- cost benefit analysis
- legal issues
- the role of file formats, standards, and metadata
- storage and maintenance
- disaster planning
- the relationship between preservation and access
- preservation strategies, approaches, and methodologies
- technology forecasting.

For more information:  
<http://www.library.cornell.edu/iris/dpworkshop/>

# PAC CORE ACTIVITY

## USA and CANADA

LIBRARY OF CONGRESS  
101 Independence Avenue, S. E.  
Washington, D. C. 20540-4500 USA

**Director:** Mark ROOSA  
Tel: (1) 202 707 7423  
Fax: (1) 202 707 3434  
E-mail: mroo@loc.gov

## WESTERN EUROPE, AFRICA, MIDDLE EAST

PAC INTERNATIONAL FOCAL POINT  
BIBLIOTHÈQUE NATIONALE DE FRANCE  
T3 N4 - Quai François-Mauriac  
75706 Paris cedex 13 FRANCE  
**Director:** Marie-Thérèse VARLAMOFF  
Tel: 33 (0) 1 53 79 59 70  
Fax: 33 (0) 1 53 79 59 80  
E-mail: marie-therese.varlamoff@bnf.fr

## EASTERN EUROPE and THE CIS

LIBRARY FOR FOREIGN LITERATURE  
Nikolo-Jamskaya Street 1  
109 189 Moscow  
RUSSIA  
**Director:** Galina KISLOVSKAYA  
Tel: (7) 095 915 3621  
Fax: (7) 095 915 3637  
E-mail: gkislov@libfl.ru



## LATIN AMERICA and THE CARIBBEAN

BIBLIOTECA NACIONAL DE VENEZUELA  
Centro Nacional  
de Conservación Documental  
Edificio Rogi, Piso 1, Calle Soledad  
Zona Industrial La Trinidad  
Caracas, VENEZUELA  
**Director:** Aurelio ALVAREZ  
Tel: (58) 2 941 4070  
Fax: (58) 2 941 4070  
E-mail: dservtec@bvn.bib.ve

## ASIA

NATIONAL DIET LIBRARY  
Acquisitions Department  
10-1, Nagatacho 1-chome,  
Chiyoda-ku, Tokyo, 100-8924  
JAPAN  
**Director:** Takao MURAYAMA  
Tel: (81) 3 3581 2331  
Fax: (81) 3 3592 0783  
E-mail: pacasia@ndl.go.jp

## OCEANIA and SOUTH EAST ASIA

NATIONAL LIBRARY  
OF AUSTRALIA  
Preservation Services  
Branch  
Canberra ACT 2600  
AUSTRALIA  
**Director:** Colin WEBB  
Tel: (61) 2 6262 1662  
Fax: (61) 2 6273 4535  
E-mail: cwebb@nla.gov.au