Metropolitan Toronto Reference Library  
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Organization  
The Metropolitan Toronto Reference Library (MTRL) is Canada's largest public reference library. Its collections are subject-divided, 99% non-circulating and are maintained at the undergraduate university level. Apart from the Metro Urban Affairs Library situated in Metro Toronto Hall and Alpha Ontario, the Ontario Literacy and Language Training Centre, all departments of MTRL are located in one building (built in 1977) spread over six floors.

MTRL came to exist in its current form in 1967, although the history of the Library goes back to 1830 when the Toronto Mechanic's Institute was founded, after which it operated for 85 years as the central library for the Toronto Public Library system. MTRL is operated by the Metro Toronto Library Board, a special library service board, and provides regional services to the city and borough public library systems that make up the Metropolitan Toronto region.

Statistical Overview  
The Library holdings consist of approx. 1.5 million volumes (monographs and bound periodicals), 2.5 million other materials (films, tapes, microforms, maps, fine art, ephemera, etc.) plus 360,000 linear meters of manuscript materials.

In 1991, the 1.4 million visitors (+13% over 1990) to MTRL asked 1.5 million questions (+17% over 1990), used 3.5 million items (+11% over 1990) and made 3.1 million photocopies (+9.1% over 1990).

Preservation Services Department  
Organization. The department is part of the Systems and Technical Support Division and has existed in its current form (Binding Unit and Conservation Lab) since 1984. The history of binding at MTRL goes back to the early 1880's, with the "Restoration Laboratory" established in 1960 with the help of Willman Spawn of the American Philosophical Society.
The department is responsible for a comprehensive preservation programme for the care, handling and treatment of the collections of MTRL (not the city and borough systems). This includes the preventive care, protection and treatment of collections; environmental control; disaster planning; development and implementation of policies/procedures for collection care and handling; binding specifications, exhibition loans, off-site storage, etc.; and remedial measures ranging from basic repair on current general collection materials to full conservation on Special Collections.

The department also acts as a preservation information resource for libraries and other organizations in and around Toronto, and responds to about 500 public inquiries a year.

Statistical Overview. A total of approximately 28,000 binding treatments are done per year, of which about 3,000 are done in-house (mostly repairs because of heavy use and vandalism). The remaining 25,000 items are prepared and sent to commercial and hand bookbinders.

The Conservation Lab completes between 2,000 - 7,000 treatments a year, the volume depending on the nature of the materials submitted. The majority of this work is done for those departments with Special Collections - History, Arts and Languages & Literature.

Resources. In 1991, the departmental budget was approximately $560,000. This figure covers salaries, outside binding services, equipment maintenance and some supplies. Equipment, automation expenses and preservation facility-related costs are not included in this figure.

There is a total of eight staff (manager, three conservators, binding supervisor, three binding assistants). Six positions are full-time permanent and two are full-time temporary. Interns have been taken in on a fairly regular basis over the last eight years.

Repair Programme. The repair programme for MTRL collections is a component of the Preservation Services Department programming and remains in a constant evolutionary state. Some basic repairs (mending torn pages) are done by Public Service Division staff after training by Preservation staff. Of the repairs done by the Preservation Services Department, the Binding Unit would handle materials of a more routine nature. Treatments of a more complex nature and all Special Collections materials come to Conservation. Work quotas for annual binding submissions are established for each department, although this is flexible and is usually adjusted towards the end of the year. Work is submitted to Binding on a needs basis, although work is proceeding to develop a more planned long-term approach. Materials submitted to Conservation may come through the MTRL Priority Conservation Submission System, the Exhibition Programme or non-planned rush materials.

Specifications for treatment are determined by Preservation Services. The policy is to try to retain as much of the original as possible irrespective of age, value, etc. All materials used for MTRL repairs are those "recommended" for preservation. The complexity and extent of treatment varies considerably (including pamphlet binding, mending of tears and loose pages, tipping in of detached or replacement pages, eradication of graffiti, enclosures, removal of gum, etc.). Backlog for repair of routine materials is generally less than a week.

Preservation Services is currently conducting training sessions on the design and production of phase boxes for staff from several Public Service Division departments. While new and quite small in scope, this project is running smoothly and may be implemented more widely at MTRL.

"Preservation" Barcode and Security Labels/Strips

In 1984 MTRL identified a need to re-examine the security system used at the Library. Our experience was that the constituent components, especially the pressure-sensitive adhesive(s), of the security labels then in use, were not stable over time, causing damage to collection materials. Furthermore, advances in security detection technology brought into question the continued use of the existing radio frequency (RF) system. For example, the presence of multiple RF labels in a single item (bound periodical) generally negates the security detection function of the labels, as would several items each with its own security label. This is not the case.
in other types of security environments, where the presence of multiple labels in one or more items enhances the security function that would normally exist for an item with a single label. As a result of these concerns and the concurrent implementation of VTLS, the Library's new integrated automation system, a thorough examination of current security detection technology, barcode technology and related preservation issues was undertaken. The goal was to identify specifications for label/strip(s) that would not damage our collections, while at the same time meet other functional and construction/design requirements, i.e., security, barcode scannability, longevity and cost-effectiveness. In addition, it was necessary to be consistent with other relevant agreements with the city and borough library systems, e.g., use of Codabar barcode format.

Since 1984 contacts were made with a large number of library security and barcode vendors, label companies and institutions using various systems for security and barcode purposes. Research of existing security and barcode labels and strips was undertaken in an effort to determine the specific components of various systems. This information was surprisingly difficult to obtain and was in some cases "unavailable" or "unknown." At the request of MTRL the Canadian Conservation Institute (CCI) and several other conservation scientist consultants/labs (Lavinco Conservation Science Services and Integrity Testing Laboratory) were contracted to conduct research on the components of various systems, mostly adhesives. A specialist company in the security industry (Custom Security Industries) was also contracted to assist with the development of the new labels/strips.

At the end of these investigations, it was decided that none of the existing security/barcode systems, as they were then designed, were suitable for use by MTRL. Because we have, in effect, a 100% retention policy for our collections it is essential that the labels do not damage our materials. It is also important that the adhesive stick well to the wide variety of book and non-book materials found in library collections today, including paper, board, buckram, leather and various plastics. It proved to be impossible to identify an available product(s) that met MTRL needs. Thus, based on the results of our research, specifications particular to our needs were drawn up and a Request for Proposal [RFP] for Barcode/Security Labels and/or Strips was issued on January 8, 1991.

In March 1991 the Board of the MTRL approved the adoption of an integrated barcoding/security strategy based on electromagnetic security detection technology. The contract was awarded to ID Security Systems Canada Inc., a subsidiary of ID Security Systems International BV, The Netherlands. ID Systems also supplied the EM detection system which was installed to function concurrent with and augment existing security measures.

The integrated strategy involves the use of three types of permanently-sensitized labels and strips. Various combinations of labels and strips are now being used on the various collection formats to fulfill the following functions:

- Security against theft.
- Tracking of materials throughout processing, etc.
- Circulation (conventional circulation for our small number of circulating materials as well as future "in-house" circulation for the purpose of collection management).

Exceptions to the above include certain types of materials that cannot be made secure using labels and strips without the risk of damage to the items or playback equipment, i.e., microfiche or compact discs. In these cases only the container can be made secure. Our Special Collection materials are not directly labelled either.

All labels and strips are constructed from materials meeting preservation, barcode and security criteria laid out in the MTRL Request for Proposal. For example, the barcode/security label has a polyester film imprinted with a non-run/smear laser barcode and Library information, laminated with a spunbonded olefin, using an acrylic adhesive in which is embedded a security wire/ribbon. To the best of our knowledge, based on CCI and other research and product literature, the adhesive will remain "stable" over the long term in comparison to other pressure-sensitive adhesives. It has also proven to adhere well to a wide variety of materials.
Future Directions

Priority is being given to a broader-based approach for the care of collections as a whole and creative ways of doing more with less. MTRL plans to further develop its repair programme with the goal of treating items at their earliest point of need. These larger issues will be examined by the Preservation and Priorities Committee. It is also anticipated that the Library's strategy for "preservation" security/barcode labels and strips will continue to evolve as our needs change and as technology advances. Already planned is the development of a two-part label for use with new acquisitions going for immediate binding that need to be barcoded/secured during processing and cataloguing. It is also planned to use call number labels having the same acrylic adhesive that will be non-damaging to the collections.

Also currently in development is the refinement of an interface between VTLS, MTRL's integrated automation system, and ABLE binding software. The goal is to download all necessary bibliographic information for monograph binding from VTLS to ABLE (serials entered directly on ABLE). It is projected that this will result in considerable cost savings across the organization, as well as consistency of spine stamping relative to the information in the on-line catalogue.