

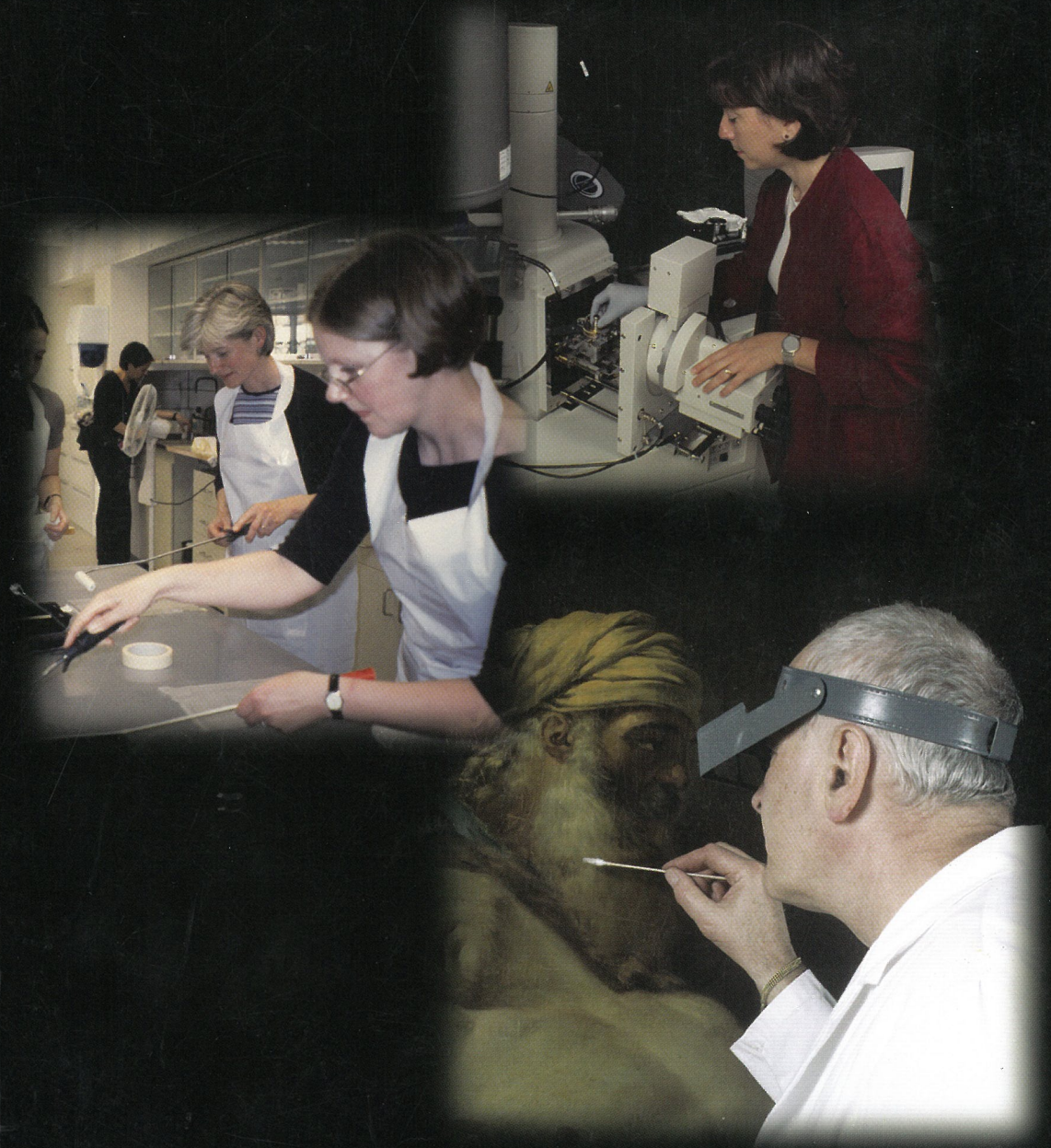
CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Annual Report

2002-2003



Canadian Patrimoine
Heritage canadien

Canada

CCI Mission Statement

“We are committed to preserving Canadian heritage and supporting conservation and heritage institutions in Canada by creating and disseminating conservation knowledge and providing expert services.”

We ensure client satisfaction through:

- providing high-quality, reliable services, advice, assistance and information on:
 - new conservation knowledge and practices
 - care of collections and preventive conservation
 - treatment of artifacts and works of art in Canadian museums, art galleries, archives and libraries
 - materials or condition of heritage objects to improve the understanding of collections
 - museum facilities and planning
 - transportation for fine arts and artifacts
- collaborating with regional, provincial, territorial, national and international cultural communities, institutions and related agencies

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Director General's Message

The 2002-2003 fiscal year represents a milestone for the Canadian Conservation Institute - its 30th anniversary. A lot has changed since CCI was created. The teaming of conservators with scientists has resulted in a large number of ground-breaking treatments, research and analytical techniques over the years. The blend of practical experience with scientific knowledge marks CCI as unique. This body of expertise is appreciated, applied and in demand both in Canada and abroad for the care and preservation of heritage collections.



CCI's accomplishments are as important and impressive as they are varied and innovative. I could spend pages recounting examples of the expertise and

knowledge that have been generated by the Institute's conservators and conservation scientists. However, I think that the nature and severity of the challenges facing conservation are such that it is imperative to look ahead to see what needs to be done to safeguard our past. Otherwise, 30 years from now, the annual message might be one of opportunities lost rather than of those taken.

Why and how do we find ourselves at this critical juncture? There is no single answer, just as there will be no single solution for solving the problems that face not only CCI and Canadian collections, but also those found in every country around the world.

Geo-political events of the past few years underscore the fragility of the cultural artifacts that help define cultures. Deliberate, human-made destruction, whether in the form of regional conflicts, religious and ethnic strife, terrorism or pollution, threaten and destroy some of the very objects that help us understand who we are and where we have come from. In addition, natural disasters - floods, earthquakes, hurricanes and the like - pose serious risks to safeguarding diverse cultural heritage.

In Canada, a number of factors are contributing to our inability, as a nation, to look after heritage collections. A major factor is that there are not enough dollars available to do the job properly. In the past decade, budgetary restraints at the federal, provincial/territorial and municipal levels have forced heritage institutions to re-assess their priorities.

Museums, archives, libraries and galleries had to ask themselves some tough questions about how to divide smaller wedges from a smaller fiscal pie. Were scarce funds going to be used to acquire new objects and paintings? To stage new exhibits? To build new facilities or upgrade existing ones? To provide public programs? To care for collections? To improve storage facilities? To advertise more to attract paying customers and their much-needed cash? Clearly, "business as usual" was no longer an option. At a certain point, these institutions simply could not continue doing more and more with less and less.

In some institutions, activities have been reduced; in others, whole areas have been eliminated as new avenues for revenue generation were explored (for example, blockbuster exhibitions that attract large, paying crowds). In many cases, conservation fell to the budgetary axe. With some improvements over the years in displays, lighting and humidity control, there was a feeling that such preventive measures meant less attention to conservation treatment was indicated.

Thirty years ago, the conservation profession was practically non-existent in Canada. Slowly, but gradually, academic training was developed. Rather than having to attract foreign conservators, heritage institutions were able to hire Canadian professionals. Over the years, talented conservators have been home-grown. Conservation scientists have come to CCI - and still continue to come - from university and college science or technology backgrounds. Many receive on-the-job training at the Institute.

Sadly, the pendulum is swinging backwards. Growing numbers of conservators

are unable to find work at home and either are accepting positions outside the country or are leaving the field altogether. Finding trained successors for experienced conservators and conservation scientists is now a growing problem. The loss of their acquired expertise and knowledge would be nearly impossible to replace.

There is no doubt that the health of Canadian collections is failing due to a lack of treatment. As well, improper storage, handling and display of heritage objects lead to their deterioration. Even the transportation of large exhibits puts these valued items at risk due to vibration, temperature changes and poor environmental conditions sometimes encountered during travel. Mould is a growing problem in heritage collections and buildings as well as to the health of those who work around and in them. Aging infrastructure only contributes to the problem. The dangers of pesticides once used in treating objects pose additional health and safety issues.

Part of the blame for the current situation rests with a lack of outreach on our part. We have not taken adequate time to explain and educate the public about the necessity of conservation efforts to preserve our heritage. In July 2001, the International Council of Museums (ICOM) recognized this challenge. At its annual meeting, held in Barcelona, ICOM passed

a resolution calling on its members to "stimulate information dissemination on the fragility of heritage and build public awareness of conservation activities."

CCI, as a knowledge-based institution, takes this responsibility seriously. Through workshops, publications, our library, our Web site (www.cci-icc.gc.ca), attendance at conferences and membership in various organizations, CCI staff work to share the results of years of accumulated experience.

This year we launched a new Web site initiative, "Preserving my Heritage." It is geared to the general public rather than conservation professionals and contains a treasure trove of information on how to care for personal collections. The Web site features a photographic gallery of objects before and after treatment, an interactive quiz and much more. The site has won two awards. Several staff members have received impressive awards as well. This recognition demonstrates a vibrancy that underlines our commitment to promote the practice of conservation in Canada and elsewhere for at least the next 30 years.



Bill Peters
*Director General and Chief Executive Officer
Canadian Conservation Institute*

Overview of the Canadian Conservation Institute

Organization

The Canadian Conservation Institute (CCI) was created by an Act of Parliament in 1972 and became a Special Operating Agency of the Department of Canadian Heritage in 1992.

The Chief Executive Officer (and Director General) of the Institute is accountable to the Deputy Minister of Canadian Heritage through the Acting Executive Director of Heritage and the Assistant Deputy Minister, Citizenship and Heritage. The Director General has the same level of delegated authority as the Assistant Deputy Minister regarding a number of financial, administrative and human resource responsibilities.

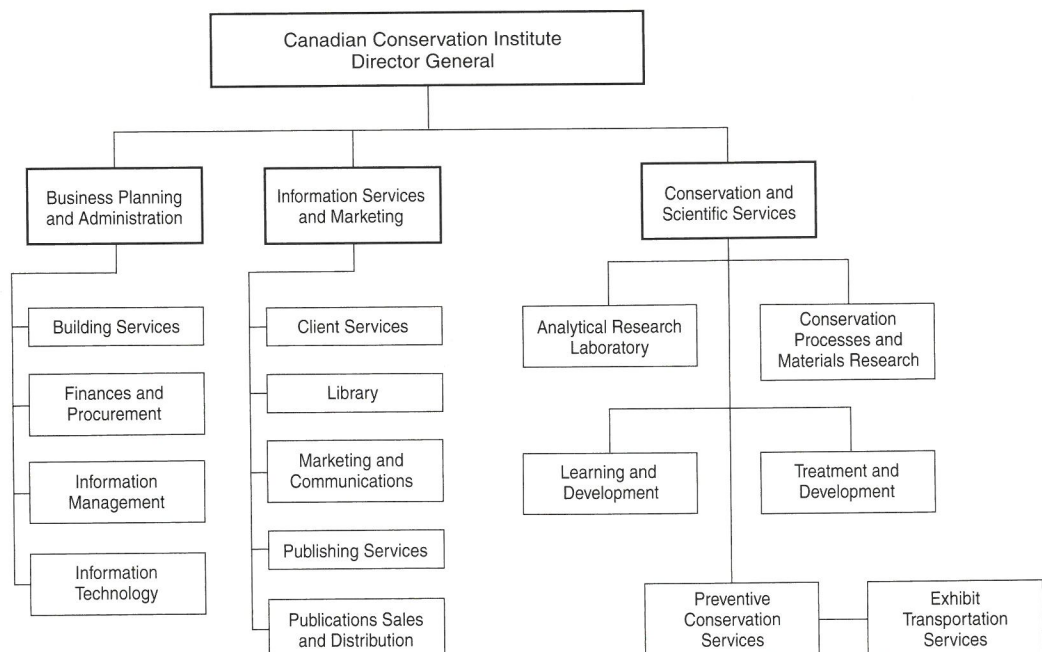
An Executive Committee, comprised of the Director General and three Directors, focuses on corporate priorities, strategic decisions and long-term planning. It is supported by a Business Management Committee that includes the Director General, Directors, Managers from the Conservation and Scientific Services Directorate and other members of the Institute as required.

CCI is financed through appropriations, fees for services and vote-netted revenue.

Strategic Objectives

The Department of Canadian Heritage recognizes the importance of preserving our heritage for future generations. It has set four strategic objectives that CCI incorporates into its business planning process and ongoing activities. These goals are:

- **Canadian Content:** promoting the creation, dissemination and preservation of diverse Canadian cultural works, stories and symbols reflective of our past and expressive of our values and aspirations
- **Cultural Participation and Engagement:** fostering access to and participation in Canada's cultural life
- **Connections:** fostering and strengthening connections among Canadians and deepening understanding across diverse communities
- **Active Citizenship and Civic Participation:** promoting understanding of the rights and responsibilities of shared citizenship and fostering opportunities to participate in Canada's civic life



CCI is the Government of Canada's principal program for conservation, conservation-based research and service delivery. The Institute's research and services are key to providing the information required for Canadians and Canadian institutions to protect their cultural heritage. In 2002-2003, CCI established five goals directed towards the Canadian heritage community and its own internal governance.

1. *To work towards improving the condition of and access to Canadian collections held in public trust, as well as the understanding of the materials comprising these collections.*

This goal relates to the departmental objective of fostering and strengthening connections among Canadians, promoting preservation and deepening understanding. The many heritage institutions that represent Canada's cultural diversity also provide a means of contributing to a sense of shared citizenship by offering an accessible, way for Canadians to share their values, tell their stories, celebrate their diversity and communicate with one another.

2. *To increase the quantity of client advice and information that will be available to enhance the knowledge, skills, understanding and abilities of custodians of public collections and broaden access to our heritage collections.*

CCI helps to accomplish the departmental goal of promoting the preservation of diverse Canadian cultural works, stories and symbols by ensuring that heritage collections are available to present and future generations.

3. *To increase public engagement and awareness of the importance of caring appropriately for heritage collections.*

CCI participates in achieving the departmental objective of promoting the understanding of the rights and responsibilities of shared citizenship and the fostering of opportunities to participate in Canada's civic life. The country's cultural heritage is more

than the collections contained in museums, art galleries and archives. It includes the personal objects, artifacts and heirlooms that individuals have amassed to document their collective accomplishments.

4. *To improve the Institute's capacity to provide services and build links among Canadians from different ethnic groups and Aboriginal communities nationwide.*

CCI strives to offer the best possible services and products to Canadians, as part of the departmental commitment to strengthening connections among citizens and deepening understanding across diverse communities.

5. *To eliminate the Institute's structural deficit.*

In order to engage Canadians and increase awareness of the need for preserving the country's cultural heritage, CCI needs to be able to deliver services and programs effectively and efficiently. Sufficient base funding is required to provide services and capital replacement. While the Institute continues to explore every avenue of revenue generation available, there are remaining requirements to maintain capital needs to provide service to Canada's heritage collections.



CCI's advice to clients is based on the knowledge gained through treatments and research.

Helping to Preserve Canadian Collections

A key component of CCI's mandate is the treatment of the cultural objects held in more than 2,200 museums, art galleries, archives and libraries across Canada. The Institute strives to improve the condition of

– and access to – all Canadian collections, including those representing the many cultures of Canada.

Treatment projects often require the talents of both conservators and conservation scientists. This approach sets CCI apart from most other facilities around the world. Its unique multi-disciplinary approach has resulted in both innovative treatments and ground-breaking research.

Throughout the 2002-2003 fiscal year, CCI treated

a wide variety of objects and undertook new activities. Some highlights include:

Treatment was completed on *The Death of General Wolfe* (1775) by British artist James Barry from the collection of the New Brunswick Museum. This project involved conservators, scientists and curators from CCI, the National Gallery of Canada, the Library and Archives Canada and the New Brunswick Museum. A virtual exhibit on the painting can be viewed at www.gnb.ca/0130/english_virtual.

Many other paintings from Canadian collections were restored at CCI over the course of the year. Among them were an untitled painting of Signal Hill (belonging to the City of St. John's, Newfoundland Archives); a pastel portrait of Major General John Small from the collection of the Musée du Château Ramezay in

Montreal; a compilation of historic 1874 photographs of the Conqueror Hose Company in Ottawa for the Canada Science and Technology Museum; and a painting by contemporary Canadian artist Robert Houle from Toronto.

Among CCI's projects was the treatment of the wooden Judges' chairs and bench at the Supreme Court of Canada. Maintaining the integrity of the original design and historic fabric, while incorporating modern ergonomic functions, was recognized by the Department of Public Works and Government Services Canada as a model of good project management and client communication.

Other artifacts were sent from various museums across Canada for treatment. They included a rare sampler, a Queen Anne doll, petticoats, shifts, wigs, a music stand, cellarette and other furniture as well as rare coins and other currency, stamps, church records and a harp.

Other unusual treatments involved examining a 17th century astrolabe from Christian Island and treating a nearly 2,000 year old artifact from Newfoundland.

During the year, CCI staff provided a wide range of on-site work and consultation visits to clients across Canada. These ranged from advice on repairing historic steam locomotives and plaster sculptures, to surveys of collections and historic painted ceilings, underwater archaeological sites and modern art collections to the recovery and freeze-drying of archival material from a fire-bombed synagogue in Toronto. An important part of CCI's consultations included visits and discussions with Aboriginal communities about their collections and cultural heritage centres.

There is growing concern for the health and safety of those who handle heritage collections. Research has revealed that artifacts in some collections are affected by mould due to damp storage conditions or by toxic materials and pesticides that were used on some natural history and



*Treating the painting *The Death of General Wolfe* was a collaborative effort.*

ethnographic objects. Responding to a need voiced by the Canadian conservation community, CCI continued working with institutions and owners of contaminated collections as well as with health specialists to try to find safe and practical solutions to this problem. A new Technical Bulletin (No. 26 *Mould Prevention and Collection Recovery: Guidelines for Heritage Collections*) promises to be a valuable reference for conservators and managers of collections.

CCI expanded its architectural services during the 2002-2003 fiscal year by negotiating a Memorandum of Understanding with Public Works and Government Services Canada to provide the Parliamentary Precinct Directorate with conservation services and a dedicated conservation position. The Senior Collections Preservation Advisor is responsible for developing collections management systems and preservation advice, heritage policy and guidelines for managing Parliamentary collections of moveable art and architectural elements.

In other architectural conservation activities, CCI staff advised on the structural conservation needs of a post office building in Montreal, the former city hall in Ottawa and historic finishes at the Ruthven Park mansion (a national historic site in Cayuga, Ontario).

Site Visits

CCI's outreach activities included site visits across Canada and some in the United States. Many institutions were visited by CCI's conservators and scientists (see map on page 7).

Exhibit Transportation Services

As part of the effort to make collections available to Canadians, CCI operates Exhibit Transportation Services (ETS). It provides expert moving services and storage facilities for Canada's museums, archives and galleries on a cost-recovery basis.

Based in Gatineau, Quebec, ETS moved 121 exhibits for 145 heritage institutions

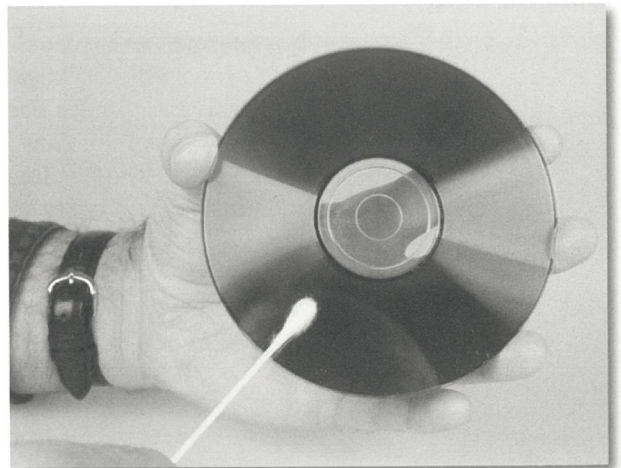
during the year and handled more than 8,500 items. The ETS vehicles logged about 493,000 km across Canada and the United States.

Parliamentary Precinct

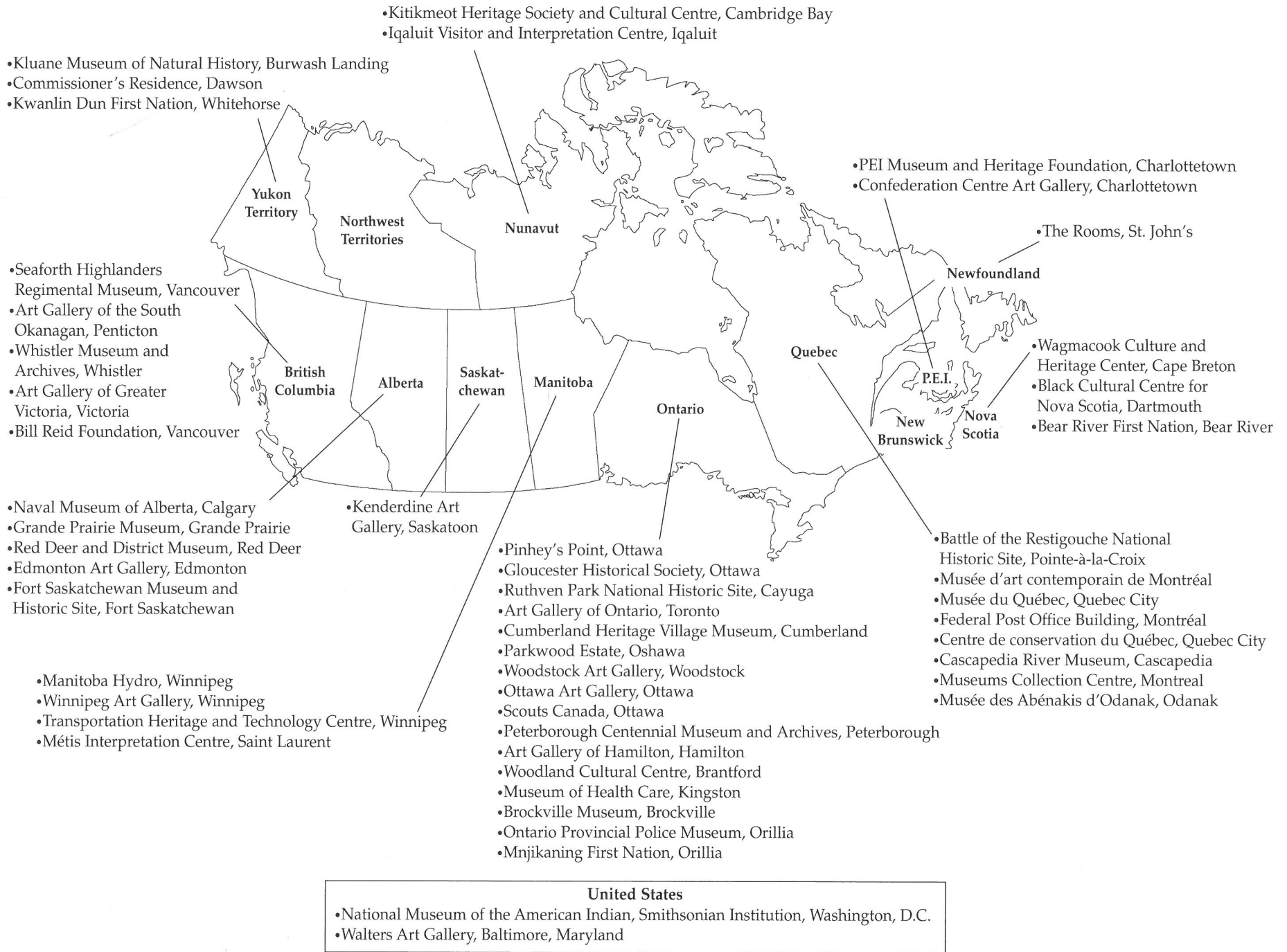
The Parliament Buildings, some dating back to the mid-19th century, have symbolic and historic significance for all Canadians. They are tangible and intangible representations of shared national identity. The care of the Parliamentary Precinct falls to an Advisory Council, which includes the Director General of CCI. Over the course of this century, the Government of Canada is undertaking a major rehabilitation project on the buildings. CCI professionals will be acting as expert technical advisors on the preservation of heritage elements such as interior architectural features.

Symposium 2003

Planning continued for an international symposium that will take place in Ottawa in September 2003. CCI, the National Library and Archives Canada and the Canadian Heritage Information Network are co-partners for Symposium 2003: Preservation of Electronic Records: New Knowledge and Decision-making. In addition to a public information day, papers and posters will be presented.



Symposium 2003 focusses on proper methods to preserve and handle electronic media.



Developing New Knowledge Through Research

To help provide services to Canada's heritage community and to improve the body of knowledge about conservation and science, CCI maintains an active scientific research program. As well, its analytical work carried out on heritage objects provides the basis for increasingly sophisticated treatment techniques and information about artifacts. The research program is designed to cover uniquely Canadian solutions to conservation issues. These solutions may involve expertise that is particularly well-developed in Canada or that address challenges peculiar to our geography, climate or history.

For more than 20 years, CCI has conducted research on paper. Considering Canada's status as a major producer of pulp and paper products, this is singularly appropriate. In addition to helping develop a permanent paper standard for Canada, the Institute has researched the aging of printing and writing paper and mass de-acidification. The research has shown, in part, the importance of removing acid and the need to encourage the manufacture of alkaline paper products.

The presence of iron gall ink is another major issue in the preservation of paper archives. It is corrosive and has a tendency to fade. CCI has been conducting research on ways to deal with this problem. One promising direction is simmering paper in water to remove all soluble acidic components. While the technique has not yet been accepted widely, it looks promising for dealing with certain types of iron gall ink corroded documents.

Between 1985 and 1995, CCI has carried out eight different studies on the impact of washing on textiles and paper. The results of these studies were presented at a conference in the United States. A major finding of the research was that the presence or absence of such common materials as calcium and magnesium will affect the stability of either textiles or paper. The Institute has now issued guidelines on the water-quality requirements for treating textile artifacts.

CCI continues its research into the materials and techniques employed by Canadian

artists. The purpose of the research is to develop a database on various artists that contains details on the materials, techniques and condition of their works of art. An analysis of paint samples from Cornelius Krieghoff's paintings was completed for the Art Gallery of Ontario. A major exhibition of paintings by Tom Thomson at the National Gallery of Canada included text panels about the Institute's analysis of the materials used by Thomson.

A new phase of the Canadian Artists' Materials project focussed on Louis Dulongpré. As well, a project to document and analyse selected painting materials from the studio of Yves Gaucher began in collaboration with the Musée d'art contemporain de Montréal and Queen's University. This came about as part of the preparations for a large retrospective exhibition scheduled to open in fall 2003 at the Musée d'art contemporain de Montréal.

Nearly 100 analytical projects were undertaken for Canadian and foreign clients. These ranged from the study of paintings, sculpture, decorative arts and architectural elements to mineral specimens, scientific instruments and early photographic technology. All objects that come to CCI undergo photo-documentation and scientific imaging that includes x-radiographs, 35mm and other film types and computer generation of presentation slides.

Major research continued to focus on providing a better understanding of the materials composing museum objects. For example, general understanding of the behaviour, properties and care of metals is not widely accessible to museum professionals. CCI has amassed a considerable body of information on the subject. During the year, the manuscript for "Metals and Corrosion: A Handbook for the Conservation Professional" was completed. To be published in the next fiscal year, the book contains chapters on the metals commonly found in museum collections, such as aluminum, copper, gold, iron, lead, nickel, silver, tin and zinc.

The conservation of archaeological metals is a less well-known strength of CCI's.

The assessment of these techniques is particularly pertinent because of Canada's investment in the conservation of metal materials from many sites across Canada, such as the 16th century Basque whaling site at Red Bay, Labrador.

During the year, a draft manuscript was completed on the "Removal of Chloride and Iron Ions from Archaeological Wrought Iron with Sodium Hydroxide and Ethylenediamine Solutions". The manuscript deals with the advantages and disadvantages of two different methods of treatment, one widely adopted and the other not so well-known.

Canada has a uniquely well-developed and internationally recognized research capacity for testing on the use and treatment of adhesives in conservation. Questions about adhesives are also quite important in the care of palaeontology collections outside Canada and in Canada's museums such as the Canadian Museum of Nature and the Royal Tyrell Museum in Alberta, and Dinosaur National Monument and the Mammoth Site in the United States.

Another major challenge in conservation is that adhesives should be removable and not become acidic, brittle or discolour over time. Early on, CCI undertook research on the long-term stability characteristics of adhesives in conservation. The most recent research applies to cyanoacrylates (better known as "krazy glue" or "super glue") that have been adopted for preparing and conserving fossils in conservation treatments such as the re-assembly of fossils remains. CCI has undertaken a study to look at the stability of cyanoacrylate adhesives in the presence and absence of different types of fossil material to determine if they might be suitable for any or no type of fossil material. As they age, cyanoacrylates emit formaldehyde. CCI has undertaken a study of this with a view to learning about the long-term performance of some commercially available adhesives.

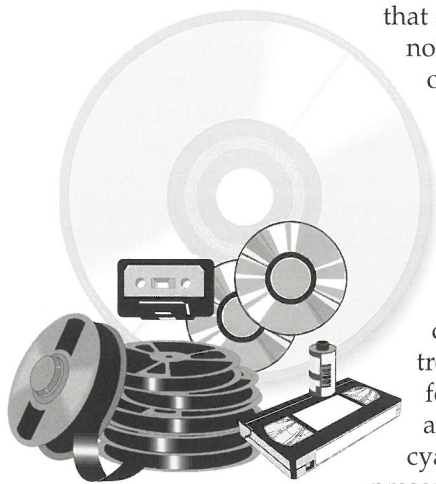
As well, the results of an important research project on the synthesis and

characterization of metal soaps was published. Metal soaps are of considerable interest in conservation because of their effect on paint films. This paper was the first comprehensive publication presenting x-ray diffraction data on these materials.

Other analytical projects involved paintings, waxed-paper and glass negatives, textile fragments, frescoes, architectural samples, bronze sculptures and minerals.

CCI has begun developing an interesting new software application for improving the interpretation of thermal analysis of collagen fibres. The technique, using image analysis, has improved the quality of microscopical thermal stability measurements. This will help understand the conservation of artifacts of Canada's First Peoples who used natural materials such as untanned skins and leather, which are difficult to conserve. This leading-edge, detailed scientific study has been applied to CCI's work on the analysis of the Archimedes Palimpsest and on historic U.S. government documents, such as the *Constitution*, *Declaration of Independence* and the *Bill of Rights*. In addition to representing a major step forward in such analyses, the technique offers interesting new scientific potential in understanding the nature of deteriorated collagen and kinetic models of protein denaturation.

CCI has supported active, ongoing research on the recovery of modern information carriers, such as audio and video tapes, floppy discs and CD-ROMs. The federal government wants to see Canada become the most "connected" country in the world. This lends more urgency to research on how to preserve digital information. During the year, a new Technical Bulletin on recovery procedures for this media was published. In addition, the compatibility of recordable CDs and recording equipment was studied. This study evolved when it was noted that some combinations of media and hardware were effective (with low error rates in data transmission) and others were not so effective because they interacted with certain brands of hardware. As the transference of data becomes more of an issue in archives and libraries, this research will have tangible benefits.



Disseminating Knowledge to the Community

The 2002-2003 fiscal year was a busy one in CCI's publication area. Newsletters No. 29 and No. 30 were produced as was the 2001-2002 Annual Report. *Mount-making for Museum Objects*, Second Edition by Robert Barclay and Carole Dignard from CCI, and André Bergeron from the Centre de conservation du Québec was released. As well, a Japanese version of the book *The Care of Historic Musical Instruments*, edited

by Robert Barclay, was published by the Tuttle-Mori Agency under a licensing agreement with CCI. Additional publications included Technical Bulletin No. 25 *Disaster Recovery of Modern Information Carriers: Compact Discs, Magnetic Tapes, and Magnetic Disks*

Work was begun on a number of other publications: a book entitled *Airborne Pollutants in Museums, Galleries, and Archives: Risk Assessment, Control Strategies, and Preservation Management* by Jean Tétrault; *Metals and Corrosion: A Handbook for the Conservation Professional* by Lyndsie Selwin; *The Gentle Art of Applied Pressure* by Robert Barclay, Carole Dignard, and Carl Schlichting; and Technical Bulletin No. 26 *Mould Prevention and Collection Recovery: Guidelines for Heritage Collections* by Sherry Guild and Maureen MacDonald.

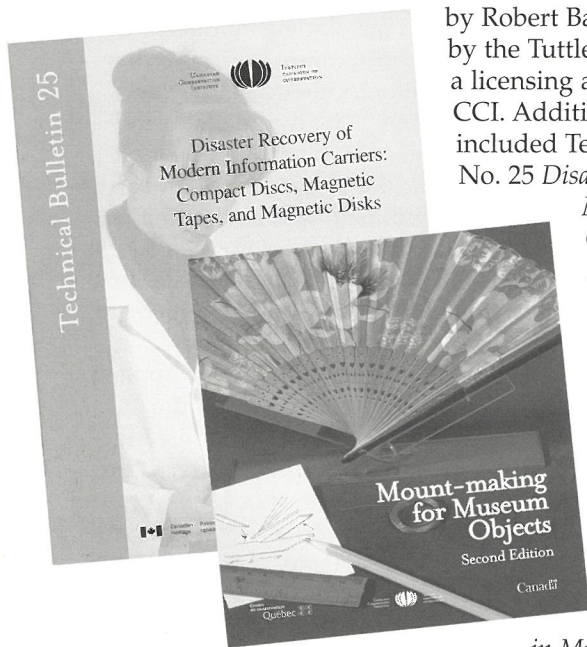
It was a record-breaking year for the sale of CCI publications and special products. Revenues totalled \$143,617, the first time that sales topped the \$100,000 mark. There were some 1,225 orders from around the world, of which 30% were from Canada, 46% from the United States and 24% from elsewhere. The most popular product by far continued to be *CCI Notes*, which accounted for more than one-third of total sales (50,000 *CCI Notes* were sold). The next most popular products were

Second Edition; *Looking at Paper: Evidence and Interpretation/Symposium Proceedings Postprints*; Technical Bulletin No. 24 *Water Quality for Treatment of Paper and Textiles*; and Technical Bulletin No. 11 *Dry Methods for Surface Cleaning Paper*. CCI now offers 155 publications for sale. Staff members have published more than 245 articles. There were 456 orders placed through the online bookstore, representing 37% of all orders. This was a significant increase over the preceding year when only half as many orders were placed over the Internet. In addition, more than 15 distributors are now re-selling CCI publications around the world.

CCI has one of the largest conservation and museology collections in the world. The library is open to the general public as well as to professional conservators. The library catalogue is accessible through the CCI Web site (www.cci-icc.gc.ca). Inter-library loan and photocopy services can be requested by mail, fax or e-mail. Unfortunately, requests cannot be handled by telephone.

In the last year, 243 books were loaned to Canadian heritage institutions as well as libraries throughout North America. The library responded to more than 235 reference requests, received 170 visitors, and added more than 400 new titles to the collection. In addition, the CCI library continues to be a significant contributor to the conservation bibliography database BCIN (www.bcin.gc.ca) and to the museology bibliography database BMUSE (under "Reference Library" at www.chin.gc.ca). Both of these bibliographic databases are now accessible worldwide, free of charge.

CCI staff also publish the results of research and treatment projects in external journals such as the *Journal of the Canadian Association for Conservation and Studies in Conservation*. Notable publications this year include: "The Characterization of Cobalt Violet Pigments," by Marie-Claude Corbeil, Jean-Pierre Charland and Elizabeth Moffatt, in *Studies in Conservation*; "Une étude des matériaux et des techniques de Jean Dallaire," by Marie-Claude Corbeil, Kate Helwig, Claude Belleau, Yanick Rainville and Karen Lawford, in *Journal of the Canadian Association for Conservation*;



"X-ray Powder Diffraction Data for Selected Metal Soaps," by Marie-Claude Corbeil and Laurianne Robinet, in *Powder Diffraction*; "The Characterization of Metal Soaps," by Laurianne Robinet and Marie-Claude Corbeil, in *Studies in Conservation*; "A Materials Investigation into the Metal Composition, Coating Structures and Treatment History of Four Ming Dynasty Cast Iron Statues," by Elizabeth Moffatt,

Aaron Shugar, Jane Sirois and Susan Stock, in *Materials Issues in Art and Archaeology VI*; and "Rock Painting Conservation and Pigment Analysis at Cueva de las Manos and Cerro de los Indios, Santa Cruz (Patagonia), Argentina," by Ian Wainwright, Kate Helwig, Diana Rolandi, Carlos Gradin, Mercedes Podestá, María Onetto and Carlos Aschero, in *Preprints, Vol. 2, ICOM Committee for Conservation*.

Learning and Development

As a knowledge-based institution, CCI is aware of the need to share the results of its research and the practice of conservation. To help accomplish this, the Institute offers specialized workshops across Canada.

During the 2002-2003 fiscal year, nearly two dozen workshops were given on the following topics:

- modern information carriers
- preservation of collections: paintings
- emergency and disaster preparedness for cultural institutions
- construction of mannequins for historic costumes
- Aboriginal facilities development
- preservation management for seasonal museums
- historical furniture
- works of art on paper
- permanence of artists' materials: paintings and works of art on paper
- precious metals
- Aboriginal market development
- history and treatment of works on paper containing iron gall ink
- products used for display, storage and transportation
- treatment of waterlogged wood
- mount-making for museum objects
- moving collections
- textile conservation for fibre artists

CCI also responds to the needs of the heritage community by delivering lectures to professional groups and associations involved with conservation and the care of collections. Over the course of the 2002-2003 fiscal year, staff members attended the following conferences:

- Association des archivistes du Québec, Gatineau, Quebec
- American Institute for Conservation, Miami, Florida
- North-Eastern Archaeometallurgy Research Group, Bethlehem, Pennsylvania
- Indoor Air 2002: the 9th International Conference on Indoor Air Quality and Climate, Monterey, California
- 19th International Congress of the International Institute for Conservation of Historic and Artistic Works, Baltimore, Maryland
- 13th Triennial Meeting of the International Council of Museums, Committee for Conservation, Rio de Janeiro, Brazil
- Old Master Drawing and Museum Lighting, Getty Conservation Institute, Los Angeles, California
- Hazardous Collections and Mitigation, Society for the Preservation of Natural History Collections, Montreal, Quebec
- Canadian Association for Conservation of Cultural Property, Kingston, Ontario

In February 2003, CCI hosted a one-day discussion forum on mass deacidification for interested professionals. Several CCI staff participated in the meeting.

For the first time in its history, CCI was unable to offer internships to conservation students and professionals. Due to the mould contamination in CCI's main building, it was decided to err on the side of caution on health and safety issues. Once building remediation is completed, the moratorium on internships will be lifted.

Reaching Out to Canadians

It is critical for CCI, a knowledge-based Institute, to share its acquired expertise with people in Canada and abroad. The goal is to ensure that the quantity of – and access to – advice and information is available for enhancing the care of Canada's heritage collections. It is also important to raise public awareness about the need to care for heritage collections so that future generations understand where they have come from.

The main CCI Web site (www.cci-icc.gc.ca) continued to be a well-used source of



information during the 2002-2003 fiscal year. The number of hits increased by 10% to 4.7 million, while the number of visitors to the site grew by 22% to 210,000. Major work was carried out on the development of a new e-services desk as

part of the Government of Canada's "Government On-Line" initiative to provide programs, services and information through the Internet to Canadians. This will allow clients to interact with CCI through a central point of access on the Web site and will provide an electronic alternative to paper-based transactions and access to data. The expectation is that the e-services desk will be available by late in the next fiscal year.

In May 2002, CCI launched a new Web site, "Preserving my Heritage," as part of our outreach initiatives to provide preservation information and advice to the general public. The site presents information on how to care for family

treasures as well as interactive opportunities for learning more about the conservation profession.

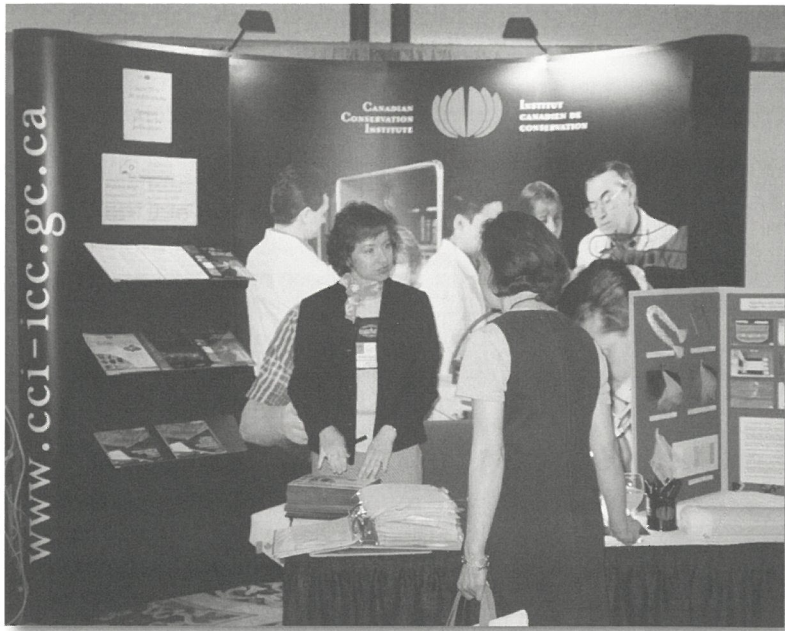
The new Web site fills a void in cyberspace – there was no equivalent site available on the Internet. Response to the new site was astounding – within the first 10 months online, the site registered more than three million hits and 125,000 visitors.

In helping to raise the level of awareness about the importance of conservation in the preservation of Canada's cultural heritage, CCI works hard to ensure that the Canadian heritage community knows about its services, products, research and expertise. In part, attendance at conservation trade shows helps the Institute spread the word by showcasing its publications and activities. During the past year, CCI participated in the annual conference of the Canadian Museums Association in Calgary, the national and provincial conferences of the Society for the Preservation of Natural History Collections in Montreal, the Association des archivistes du Québec in Gatineau, les Société des musées québécois in Sherbrooke, the Association of Manitoba Museums in Gimli, the Canadian Archaeological Association and the National Conference of Aboriginal Artistic Expression in Ottawa. Internationally, CCI was represented at the American Institute of Conservation conference in Miami, the International Council of Museums Conservation Committee in Rio de Janeiro and the International Institute for Conservation of Historic and Artistic Works meeting in Baltimore.

Beyond trade shows and conferences, CCI also advertises in the publications of eight provincial museum associations, such as *MUSE* (the Canadian Museums Association bi-monthly bilingual magazine), the *Journal of the American Institute of Conservation*, *Canadian Art*, *Forum* (the magazine of the Federation of Canadian Municipalities), *Canadian Mover* and the *Native and Inuit Yearbook*.

There were also direct mailings to national and international heritage organizations

The "Preserving my Heritage" Web site is very popular with Web users.



Trade shows and conferences are excellent venues for showcasing CCI's activities and publications.

designed to introduce CCI, its featured publications and its Web site. Also CCI staff, who travelled to various parts of the world for conferences and meetings, distributed information about CCI.

During the year, CCI received nearly 1,300 requests for information from heritage organizations, conservators, artists, suppliers and the general public. Fully 46% of the inquiries came by e-mail, the highest proportion ever. This is a clear indication of the growing use of electronic access to government services. The most commonly asked questions related to paper objects, books, training and career advice, referrals to suppliers of conservation services and products, conservation of objects, publications and the safe use of conservation materials.

A sampling of requests:

- inspection procedures and safety precautions for an exhibition of animal skins and antlers in a work of art
- the effects of off-gassing from new chairs on an archival storage area
- the impact on artifacts of an ethylene glycol leak from a boiler system
- preservation of an oak gramophone, ca. 1905

- preservation of a historic blackboard
- assessment of the stability of materials in a contemporary painting
- preservation of a linoleum floor in a designated heritage building
- how to deal with insect damage in an icon
- the use of different types of foam next to an artifact
- design guidelines for controlling relative humidity and temperature in a museum

Other Activities

Members of the CCI staff continued to be active participants on the boards of directors and various committees associated with the operation of the International Center for the Study of the Preservation and the Restoration of Cultural Property (ICCROM), the Canadian Association for Conservation of Cultural Property (CAC), the Canadian Association of Professional Conservators (CAPC) and on the curriculum committee of Sir Sandford Fleming College's program in Collections Conservation and Management in Peterborough, Ontario.

Staff delivered numerous lectures and specialized training as well as wrote a variety of articles for publication.

Throughout the year, numerous groups (including students in conservation as well as private groups) toured the CCI laboratories.

Awards

CCI and its staff received a number of awards during the 2002-2003 fiscal year.

The new public Web site, "Preserving my Heritage" (www.preservation.gc.ca), was recognized with a Gold Medal Award of Excellence for "Unique Achievement in E-Government" in the category for National E-Government Awards. The medal was presented at a gala dinner during Technology in Government Week (October 2002).

Five different CCI projects received the Department of Canadian Heritage Deputy Minister's Award for Excellence during National Public Service Week in June 2002:

- Development of the "Preserving my Heritage" Web site by a group of CCI staff was recognized for filling a void on the Internet and making available basic information on how Canadians can care for their personal heirlooms.
- The Archimedes Palimpsest Project was led by a CCI team that established the condition of the ancient text, identified fungal deterioration and reported on the various adhesives contained in it and how they should be removed.
- The Aboriginal Facilities Planning Workshop was designed and delivered to a number of Aboriginal community leaders across Canada. In this outreach project, the CCI team developed a workshop with direct community input to help design Aboriginal cultural facilities.
- The Canadian Artists' Materials Research Project was launched in 1991 to undertake a comprehensive study of the painting materials used by Canadian

artists. Not only does the information gathered provide museum curators with reference data for paintings of uncertain attribution, but it also aids conservators in devising treatments and in selecting appropriate display and storage conditions. The paintings of Cornelius Krieghoff were examined during the most recent phase of the project.

- Disaster Recovery at the Samaj Hindu Temple in Hamilton, Ontario, was recognized for its quick response involving both CCI and private conservators. Thousands of books were recovered from the arson scene and then frozen on site for transportation to Montreal for vacuum freeze drying and eventual treatment.

Robert Barclay, a Senior Conservator, was awarded a Golden Jubilee Medal for the work he has done with historic musical instruments. The award was struck specifically for the Queen's Jubilee year.

Senior Conservation Scientist Jane Down won the Preparator's Award for 2002 from the Society of Vertebrate Paleontology. The US\$5,700 prize money helped to fund a research project at CCI on the stability of cyanoacrylate adhesives for fossil material.

Reaching Out to the World

International Activities

CCI continued to maintain a strong presence in the international heritage community in the 2002-2003 fiscal year through collaborative projects, training, publications and specialized services.

The Institute contributes to and participates in a number of international organizations such as Chair of the International



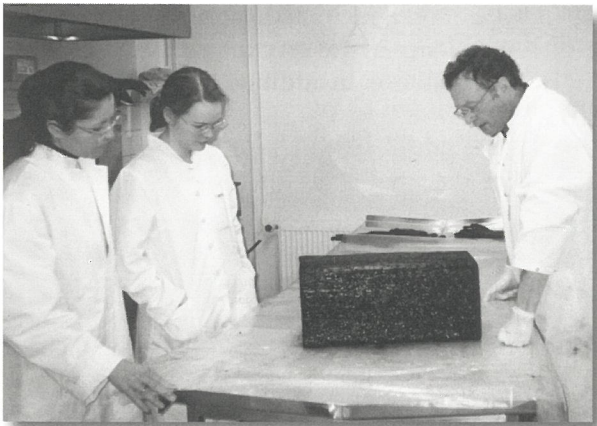
CCI collaborates with other international institutions on projects, training, publications and other services.

Council of Museums,
Committee for
Conservation (ICOM-CC)
until September 2002 and
Chair of the Council of
the International Centre
for the Study and the
Preservation and
Restoration of Cultural
Property (ICCROM)
Advisory Council.

CCI's research and
analysis of Canadian
painters' techniques
and materials extended
to France, under the
Canada-France Agreement
for Co-operation and
Exchanges in Museology,
to analyse materials used
by Jean-Paul Riopelle
while he lived in Paris.



CCI offers specialized workshops to promote and advance the practice and science of conservation.



CCI's conservators and scientists often give lectures and workshops on their specialities.

Through the partnership of CCI, The British Museum and the Victoria and Albert Museum, a successful professional development workshop – *Adhesives Today: Exploring Current Adhesive Options and Application Techniques* – was

held in London, England, in April 2002.

A four-year project continues at the Netherlands Organization for Applied Scientific Research on historical oil painting techniques.

A CCI archaeological conservator carried out on-site work for Mexico's Instituto Nacional de Antropología e Historia, Subdirección de Arqueología Subacuática. The project involved a

survey of archaeological resources in Cenotes in the Yucatan.

CCI continued to collaborate with ICCROM on a pilot project to offer a Preventive Conservation Summer School in Ottawa during summer 2003.

The Institute also delivered lectures for an International Course on Wood Conservation Technology in Oslo, Norway.

The Institute participated in a UNESCO/UNDP team that consulted on-site for the rebuilding of the National Museum in Kuwait, which had been damaged during the Iraqi occupation.

Analytical research continued on major American documents: the U.S. *Constitution, Declaration of Independence* and *Bill of Rights* as well as the Archimedes Palimpsest. Analysis was carried out on a fragment of a Gemini space glove from the U.S. National Aeronautic and Space Administration (NASA).

Building a Stronger Organization

Internal Governance

In keeping with CCI's goal of being a model organization, a workplace assessment was carried out as a follow-up to the annual Values and Morale surveys. The "Shaping Your Future" initiative identified best practices and recommended an action plan to improve the workplace. One of the actions taken was to hold a one-day seminar on conflict resolution for all staff.

As part of the Human Resources strategy, CCI continued to develop a comprehensive plan to ensure the skills and expertise necessary for providing the best possible service to clients. This involved a thorough examination of the Institute's role and services, ways of recognizing and rewarding excellence, improvement of service delivery in both official languages and steps to meet employment equity objectives related to ensuring a diverse workforce.

More than half of CCI staff will be eligible for retirement within the next several years. This reality will necessitate

additional succession planning and the recruitment of new conservation professionals before current staff retire in order to ensure the transfer of knowledge from seasoned to less experienced employees. One of CCI's greatest strengths has been the expertise and international reputation that has been built up over the past 30 years due to the unique nature of the work carried out by its conservators and conservation scientists. Replacing experienced staff requires finding people who have a minimum of two to five years of post-graduate technical training and experience. With few internships and developmental opportunities available and with a lack of adequate ongoing funding, the issue of succession planning has taken on more urgency.

In the last fiscal year (2001-2002), CCI management approved the development of competency profiles for all staff positions. This was considered important for addressing some of the succession planning issues and ensuring ongoing excellence in the services provided by the Institute. In addition to core



behavioural competencies, more specific ones were identified for managers, conservators, conservation scientists, corporate and client service groups. Each profile includes levels and indicators that were reviewed and validated through a series of English-language and French-language focus groups. During the past fiscal year, the profiles were approved by the CCI management team.

The profiles provided the basis for a "360-assessment" of the CCI management team and the development of learning plans based on the feedback received. In subsequent staffing actions, the behavioural competencies were found to be most useful in assessing candidate suitability. The competencies are being integrated into CCI's human resource management practices including recruitment, staffing, learning, career development, performance management and succession planning.

One way of ensuring efficient and effective service delivery to clients is through PROTEUS, the CCI project tracking system. Work was begun on updating the system to improve the way in which files can be captured and filed, projects tracked and evaluated. The work will continue during the next fiscal year.

Inadequate financial resources over a period of several years have compromised CCI's ability to meet its mandated responsibilities. The Institute tried to meet this challenge by spreading existing resources too thinly. In some cases, this meant that employees have had to assume responsibilities for several positions and, in others, that some positions have not been staffed at all. The outcome has been that the ability to share experience has been limited, the possibility of synergies being created have been thwarted, succession planning has been more difficult and there are symptoms of staff burn-out.

Limited resources also mean that Canada's heritage collections are being jeopardized

because CCI has become limited in its ability to act adequately as an advocate for the importance of conservation-related activities or to meet the need of heritage professionals for information and services. The ongoing financial challenge has made it difficult for the Institute to operate as a viable business-like Special Operating Agency. Service to mandated clients has been affected by the need to generate an increasing part of the CCI operating budget. It has taken a toll on the morale of CCI staff who are required to take into account financial issues when planning or carrying out treatment and research activities.

One issue common to all scientific and conservation divisions at CCI is the need to replace specialized equipment, much of which needs to be specially designed and built. During the 2002-2003 fiscal year, the Institute was able to purchase a new Hitachi S3500N variable-pressure scanning electron microscope with funds provided through the Department of Canadian Heritage.

CCI's accommodation difficulties continued to affect the Institute's ability to carry out its activities. The building that houses CCI's main centre of operations has deteriorated to the point where extensive mould contamination within the walls poses health risks to staff. Public Works and Government Services Canada and CCI developed a remediation plan for the building. A pilot remediation project began on certain areas. Before the full remedial action is undertaken, the previous work will be assessed carefully. At the same time, air testing will be continued on a daily basis. However, the situation has disrupted CCI and its ability to provide service to clients and, thus, its ability to generate revenue. As well, public tours were halted for most of the fiscal year (resuming in September 2002) and a moratorium was imposed on accepting interns.

Financial Statement 2002–2003

Appropriation		5,435,408
Transfer of Funds for Capital Equipment Replacement and other projects from Sector and Department		2,312,815
Vote-netted Revenue ¹		1,855,000

Earned Revenues

Publications and Special Products	143,617	
Conservation and Scientific Services	401,104	
Library Services	2,748	
Exhibit Transportation Services ²	979,820	1,527,289

Total Operating Budget **11,130,512**

Expenditures

Salaries		5,197,265
Postage and Freight	96,076	
Communications	80,346	
Information and Printing	126,195	
Professional and Special Services ³	1,237,899	
Travel ⁴	297,270	
Rentals	56,688	
Repair and Maintenance	85,271	
Utilities, Materials, and Supplies	1,218,1146	
Acquisition of Machinery and Equipment	810,691	
Reimbursement of Vote-netted Revenue	1,855,000	5,866,518

Canada's Membership Fee to ICCROM 63,253

Total Expenditures **11,127,036**

Balance/Rollover⁵ **3,476**

Note: This is not an audited financial statement.

1. Vote-netted revenue is a financial mechanism used by the Government of Canada to provide a draw on projected earned revenue.
2. The Financial Statement includes the Exhibit Transportation Services.
3. Professional and Special Services include contractual work, consulting and advisory contracts.
4. Travel includes museum and site visits, conference attendance, professional association business, and travel for training and emergency services.
5. The carry-forward of funds is governed by Treasury Board policies.