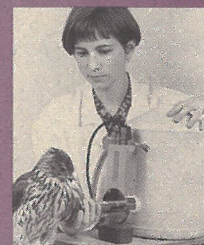
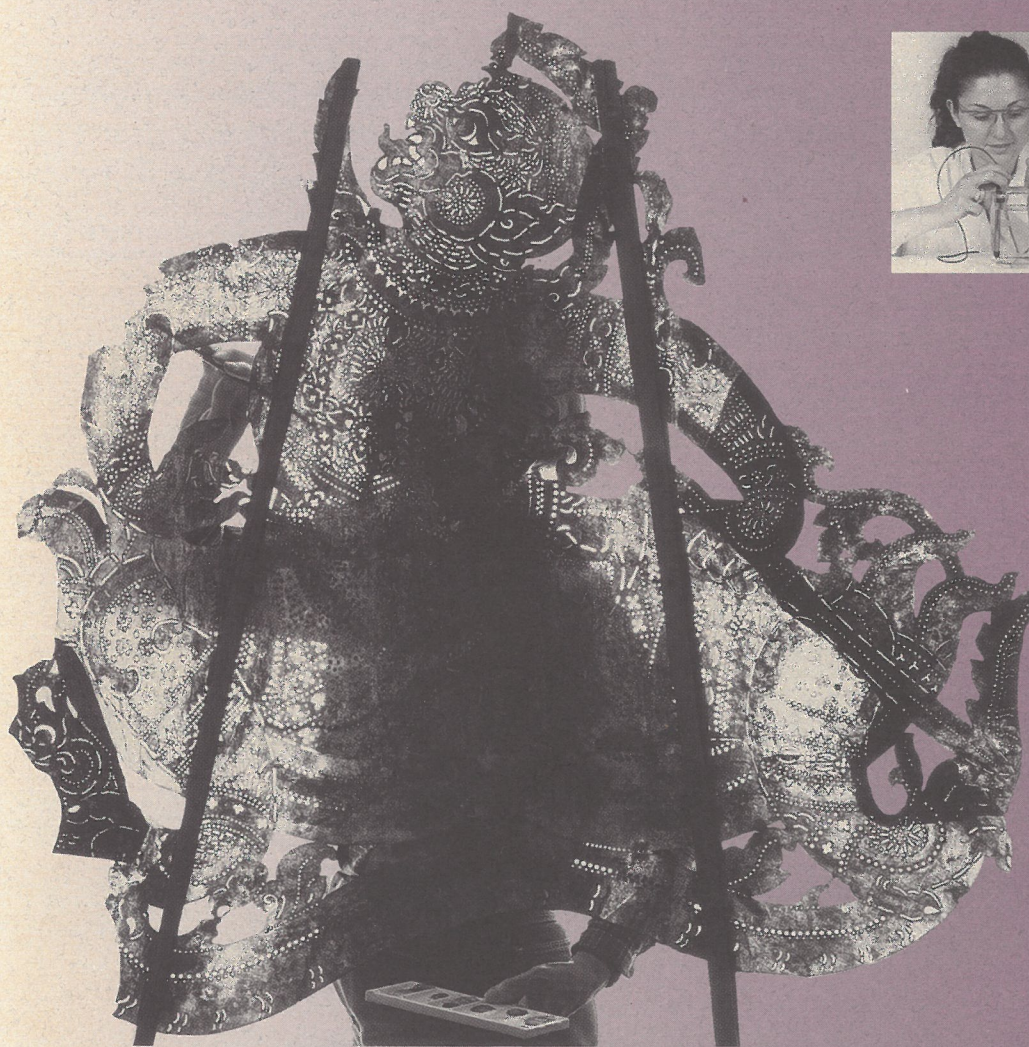




Canadian Heritage  
Canadian Conservation  
Institute

Patrimoine canadien  
Institut canadien  
de conservation

# Annual Report



1994-1995

Canada

## **Mandate**

"The mandate of the Canadian Conservation Institute is to promote the proper care and preservation of Canada's moveable cultural heritage, and to advance the practice, science, and technology of conservation."

*Framework Document, 1992*

## **Our Values**

Effective management  
Motivated and qualified staff  
Excellence in service to our clients

## **Our Business**

Scientific and professional services  
Research and development  
Conservation treatment services  
Dissemination of information  
Training

For additional copies or for further information about CCI services or programs,  
please contact

Canadian Conservation Institute  
1030 Innes Road  
Ottawa, Ontario  
K1A 0M5  
Tel.: (613) 998-3721  
Fax: (613) 998-4721

Cover:  
Indonesian shadow puppet from the Department of  
Anthropology, University of Montreal.

© Department of Canadian Heritage, 1995  
ISSN 1195-8669  
ISBN 0-662-60132-7  
Cat. No. NM95-61/1995

Printed in Canada



This publication is printed on recycled paper.

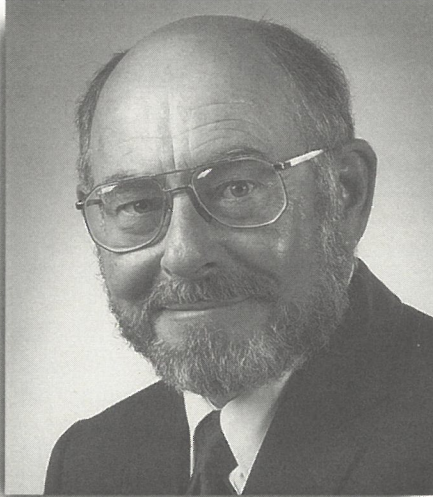
---

## Table of Contents

Introduction	2
Conservation Treatment	3
Conservation Research	6
Services to the Museum Community	9
Conferences	11
Library	12
Publications	12
International Services	13
Professional Affiliations	13
Administration	14
Organizational Chart for CCI	15
Financial Statement 1994-1995	16

## Introduction

The 1994-95 fiscal year has been a time of considerable change, not only in the way that government does business but in how funding to organizations like CCI is administered. It is during such times that CCI's mandate takes on even greater importance. During this year, CCI has continued to make an important contribution to heritage preservation, not only in Canada but throughout the world.



CCI's proposal to host the 15th Congress of the International Institute for Conservation of Historic and Artistic Works (IIC) was accepted, and the event was held in Ottawa in September 1994. The theme of the Congress — *Preventive Conservation: Practice, Theory & Research* — was an appropriate choice at a time when museums are undergoing budget cuts and are looking for the most

cost-effective methods of caring for their collections.

The week following the IIC Congress, CCI hosted a colloquium and workshop entitled *Varnishes: Authenticity and Permanence*. Its objective was to offer paintings conservators, curators, and art historians an opportunity to review and compare current and historical practices in varnishing paintings.

CCI is proud of having been involved in these two major events, and I would like to acknowledge the time and effort that was put in by the many members of CCI staff who participated. Their hard work was a major factor in the success of both conferences.

In the fall of 1994, the Heritage Services Division was transferred within the Department of Canadian Heritage to CCI's Conservation Services Directorate. We are very pleased to welcome this group to CCI, and to add their skills to our own resources in planning and evaluating security, fire protection, collections storage, and building facilities.

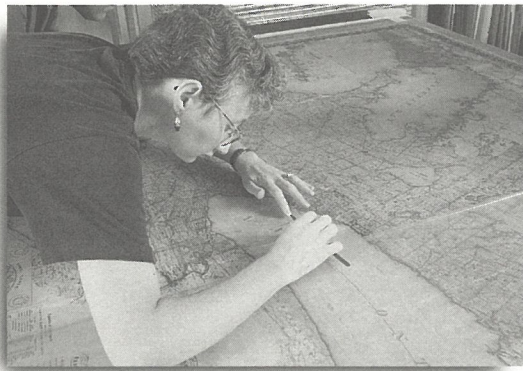
During the course of the Program Review of federal government operations, plans were put in place to amalgamate the facilities and staff of CCI and the Historic Resources Conservation Branch of Parks Canada. After serious review, it was determined that amalgamation would result in no significant advantages to the client communities served by each institution. Senior management therefore decided that an amalgamation should not take place, but that closer collaboration between the two organizations will be undertaken.

Like every other federal government organization, CCI's resources are being reduced as a result of Program Review. Despite the necessity of dealing with these budget cuts, CCI will continue to try to minimize their impact on our clients. By reviewing our programs and adapting them where necessary, CCI will continue to offer the same quality, world-class service for which we are so well known and of which we are justifiably proud.

A handwritten signature in black ink, appearing to read 'C. Gruchy'.

Charles G. Gruchy  
Director General and  
Chief Operating Officer,  
Canadian Conservation Institute

## Conservation Treatment



*Aligning small fragments of the Map of Upper Canada.*

The conservation laboratories were very active during 1994-95, and a number of important treatment projects were completed. The 1994 goal of undertaking 20,000 hours of treatment work was exceeded by more than 1,200 hours. Again this year, the focus was on complex projects.

A number of innovative procedures and approaches were developed in response to particular problems in conservation treatments. In treating a large and particularly fragile textile, it was necessary to design and build an oversized suction wash table, unlike anything available on the market. In the Works on Paper laboratory, a unique system for supporting large maps during lining operations was developed: the map is suspended in a rolled state above the lining, is gradually unrolled, and is finally lowered onto the lining. An epoxy resin/low-density thermoplastic-based filler traditionally used in furniture conservation was modified to fill the gaps in a panel painting, resulting in a resin-lean, loosely packed fill. For another treatment, a localized vacuum clamping system was developed for re-laying veneer.

### Textiles Section

The staff of the Textiles Section devoted a large proportion of their time to the treatment of the Gondar Hanging. In addition, they treated a Canadian Air Force tunic belonging to the Shearwater Aviation Museum, Nova Scotia; two military coats belonging to the Prince Edward Island Museum and Heritage Foundation; and a lady's mourning hat and a Berlin work belonging to the York Sunbury Historical Society Museum, New Brunswick. Conservation of a double-sided painted silk banner of the St. James Loyal Orange Lodge, property of the Historical Museum of St. James-Assiniboia in Manitoba, was also completed. Several interesting artifacts were accepted for treatment, including an 18th-century world map embroidered on silk that belongs to the National Archives of Canada.

### Archaeology Section

Work on artifacts from arctic sites continued with new collections of Thule and Dorset artifacts from excavations carried out in the summer of 1994 by the University of Calgary and the Arctic College, Iqaluit. The Section undertook a cost-recovery project for "Project Lead Coffins", run by the archaeology program at Historic St. Mary's City, Maryland. The project involved using parylene to treat silk ribbons found in two late-17th-century burials. A collection



*The melodeon before treatment (top) and after treatment (bottom).*

### Treatment of the Billings Estate Museum Melodeon

The Furniture and Wooden Objects Section completed the treatment of a melodeon (a small reed organ) from the Billings Estate Museum, Ontario. The melodeon had been badly damaged in a fire at the museum in 1992. Upper surfaces were water stained and had been splattered with plaster and paint from the fallen ceiling. The left front corner had been closest to the fire and had suffered losses and severe charring of the veneer. Where the veneer was lost, the underlying carcass was charred. The veneer along the front was buckled.

The treatment gave rise to the development of a number of interesting innovations. Cleaning the surface by conventional means proved to be very difficult, so an electric eraser was tried. With a white vinyl eraser tip, it proved to be ideal for removing stubborn residues. Charred and shrunken areas of the carcass and legs were consolidated and filled. Losses of the original rosewood veneer in these areas were replaced. Where necessary, the original graining was imitated using a reversible water-based colour. Finally, areas that needed revarnishing were varnished using a new resin, Arkon P-90. The advantages of this material are that it does not interfere with the original alcohol-soluble finish immediately below and it can be removed without affecting the original finish.



Cleaning a 26,000-year-old horse using water and suction.

of artifacts excavated in the 1950s from Sainte-Marie Among the Hurons was also accepted for examination and treatment. A collection of basketry, cordage, and a slate/wood knife that were found at the Scowlitz site in British Columbia (at the confluence of the Harrison and Fraser Rivers), and that belong to the Sto:lo First Nation, were treated with PEG 400 followed by freeze-drying. Some of the very fragile cordage was consolidated with parylene.

Cleaning the hide of a 26,000-year-old horse (*equus lambei*) that had been found in 1993 by gold miners working in the Yukon was of special interest. Cleaning involved developing a technique to gently remove and take samples of soil to check for parasites, pollen, etc. The hide, which is curated by the Canadian Museum of Nature and is the most complete example of this species found in Canada, is undergoing long-term freeze-drying.

#### Furniture and Wooden Objects Section

This past year saw the continuation of work on a number of long-term projects.

These included a bowfront chest of drawers from King's Landing Historical Settlement in New Brunswick, a bookcase and desk from the Bytown Museum in Ottawa, and a desk from Government House in Prince Edward Island. The conservation of a bombé writing desk from Fulford House, Ontario, was begun, and the long and technically demanding treatment of a fire-damaged melodeon from the Billings Estate Museum in Ottawa was completed.

#### Ethnology Section

Again this year, the Ethnology Section worked on a very eclectic mix of objects. The treatment of the steel doors from the silver vault at Fulford House, Ontario, was begun and is proving to be interesting and technically challenging. The conservation of a platen printing press from the McBride Museum, Yukon, was also started. This press, which originally belonged to the *Whitehorse Star* newspaper, played a long and significant role in Yukon history. Treatments that were completed include a mother-of-pearl fan for the Henry Phipps Ross and Sarah Juliet Ross Memorial Museum, New Brunswick; a small bronze sculpture for the Edmonton Art Gallery, Alberta; and a surveyor's box for Toronto's First Post Office, Ontario.

Two lengthy treatments were also completed during the year. Badly deteriorated leather components of a leather breathing apparatus, from the Ontario Fire College



Inpainting areas of paint loss.

#### Treatment of *Le Christ de Douleur, saint Jérôme et sainte Madeleine*

Conservation treatment work was completed on a small and unique 15th-century painting on oak panel, which belongs to the Musée d'art de Joliette. The subject of Christ with Saint Jerome and Saint Madeleine was painted against a gilded background decorated with punchwork. Extensive analysis was carried out by CCI's Analytical Research Services Division to identify the various materials and pigments present in the painting.

Treatment consisted of removing discoloured varnish, overpaint, and an obscuring film of calcium oxalate, all of which had been applied during previous restoration treatments. Filling material from previous repairs was removed, and fragile edges of ground and paint were consolidated. In consultation with conservators from CCI's Furniture and Wooden Objects Section, gaps in the panel were filled with a reversible material that, rather than splitting, will expand and compress with dimensional changes in the wood. Extensive losses to the ground and paint layers were filled and inpainted or regilded, and a new coating of dammar varnish was applied.

The frame for the panel painting was modified to create an airtight enclosure that will protect the painting from potential fluctuations in relative humidity.



Preliminary treatment of the Baillaigé altarpiece.

Museum, were stabilized and backed. The beaded portions of a heavily beaded chief's stool, originally from Cameroon and now in the collection of the Glenbow Museum, Alberta, required extensive cleaning and stabilization.

### Fine Arts and Polychromes Section

Treatment highlights this year in the Fine Arts and Polychromes Section include the conservation of *The Beached Margent of the Sea*, painted in 1886 by Frederick Martlet Bell-Smith, from the University of Lethbridge Art Gallery, Alberta; *The Modest Model*, by Paul Peel, from the London Regional Art Gallery and Historical Museum, Ontario; and the anonymous but truly unique 15th-century panel painting *Le Christ de Douleur, saint Jérôme et sainte Madeleine*, from the Musée d'art de Joliette, Quebec. Considerable time has also been spent this year removing overpaint, consolidating, and compensating for losses on a 19th-century wooden

altarpiece carved by Thomas Baillaigé. This altarpiece, along with a small wooden polychrome sculpture of Saint John the Baptist that is also in treatment, will form part of a major exhibition on early Quebec sculpture at the National Gallery of Canada.

### Works on Paper Section

Treatment was completed on a wide variety of works on paper. These include the large *Map of Upper Canada* printed in 1862, from the collection of the Waba Cottage Museum, Ontario. Treatment of the map involved removing a discoloured varnish, lining the map, filling and inpainting losses, and encapsulating and mounting the artifact for display. Rebinding Audubon's *Birds of America, Volume 3*, from the Library of Parliament, Ottawa, was completed, and work was initiated on *Birds of America, Volume 4*, from the Legislative Library of New Brunswick. Treatment work was carried out for the McMichael Canadian Collection, Ontario, on a number of lithographs depicting activity in the port of Halifax, produced in 1918-19 by Arthur Lismer as part of his work for the Canadian War Records Office. Conservation treatments were also completed for the Art Gallery of Nova Scotia on a set of six lithographs engraved in 1745 after paintings by William Hogarth entitled *Marriage-à-la-Mode*.



Aligning panels of the Gondar Hanging after washing on the suction wash table.

### The Gondar Hanging

The treatment of the Gondar Hanging, an early 18th-century Ethiopian tablet-woven silk hanging belonging to the Royal Ontario Museum, was completed in December 1994. The hanging measures 5.22 m by 2.18 m and is made of spun, heavy silk. It consists of three vertical panels and was originally made for a church in Gondar, Ethiopia. Woven into each panel is a series of motifs that relate to the Ethiopian church and royal family.

When the hanging arrived at CCI in June 1993, it was very dirty and the silk fibres were weak and powdered. Due to the large size and historical significance of the hanging, CCI assembled a team consisting of textile conservators, scientists, art historians, and curators to advise on the treatment. Their contribution and support added greatly to the success of the conservation process. After thorough examination of the fibres, dyes, and weave, the team agreed that the silk would benefit from washing. Therefore, an oversized suction wash table was designed and built at CCI to wash the hanging in the safest way possible. After washing, the hanging was physically stabilized for transport, display, and storage.

## Conservation Research

Staff of the Conservation Research Services Directorate were very busy and productive in 1994-95. Staff of the Environment and Deterioration Research Division became more active in the issue of preventive conservation through their involvement in the International Institute for Conservation's 15th Congress hosted by CCI and through the development and production of the widely



*Sampling a painting by Alfred Pellán.*

acclaimed poster *Framework for Preservation of Museum Collections*. In addition to providing very extensive and high-quality service to the museum community, the Analytical Research Services

Division published information and presented new Canadian developments in the science of conservation. In the Conservation Processes Research Division, the Permanent Paper Project began in earnest with very active development of new test methods for modern paper types.

### Research Consultations

Consultations were held with two client groups this year. A Paper Research Focus Group meeting solicited the views of Canadian conservators and curators

from many parts of the country. A meeting with similar objectives was held with the Canadian Council of Archives. Such meetings form part of a continuing dialogue between Conservation Research Services staff and their clients in specialist groups across Canada. The continuing need for paper research was highlighted at these meetings, and a number of concerns were raised, including the need for more information on selecting adhesives, on exhibition and storage conditions, and on the long-term effect of materials used to deacidify paper.

### The Canadian Artists' Painting Materials Research Project

A milestone in the Canadian Artists' Painting Materials Research Project was reached with the completion of a study of paintings by Paul-Émile Borduas. Research into the materials of Alfred Pellán and David Milne continues. Reports and publications are in the final stages of preparation for these projects and will appear in 1995.

### The Gondar Hanging and Other Textile Research

The results of research on the Gondar Hanging, including dye analysis and a study of the stability of the silk fibres, were presented at the International Institute for Conservation — Canadian Group conference.

Conservation of the Gondar Hanging emphasized a pressing need for research. Analysis of wash water on silk test samples revealed protein loss and made it

### Identification of Toxic Materials in Museum Specimens

CCI conservation scientists spent a week at the Provincial Museum of Alberta examining 173 items in the natural history collection for the presence of toxic arsenic and mercury compounds. Taxidermists in past years used very toxic materials to preserve specimens, unaware that they posed serious problems to humans. It is important that staff of museums be aware of problem specimens so that such artifacts can be dealt with safely. Analyzing specimens for toxicity is relatively straightforward and rapid with CCI's portable x-ray spectrometer. This important service is available from CCI to Canadian institutions with natural history collections that may contain hazardous materials.



*Using a portable x-ray spectrometer to identify toxic compounds in a specimen.*

clear that the more degraded the silk, the greater the amount of soluble material that will be lost.

Treatment requirements of the Gondar Hanging sparked the development of new techniques to characterize silk degradation.



*Measuring the corrosion potential of iron.*

### **Metals Research**

*Parliament Hill Bronzes and the National War Memorial:* CCI is participating in a long-term project to support conservation of the Government of Canada's bronze sculptures. Corrosion samples from the statues have been analyzed, and the data has been prepared for publication. Colour changes and wax losses were measured for all treated sculptures, including the War Memorial. A report was submitted to the client, Public Works and Government Services Canada.

*Archaeological Iron — The Ethylenediamine Project:* Much of the archaeological iron conserved at CCI uses the ethylenediamine treatment. Re-evaluation of this treatment commenced in 1994.

*Collaboration with Parks Canada:* CCI is participating in a study of the preservation of shipwrecks at the Fathom Five National Marine Park, Tobermory, Ontario. A test rack and metal samples have been prepared for measuring corrosion rates.

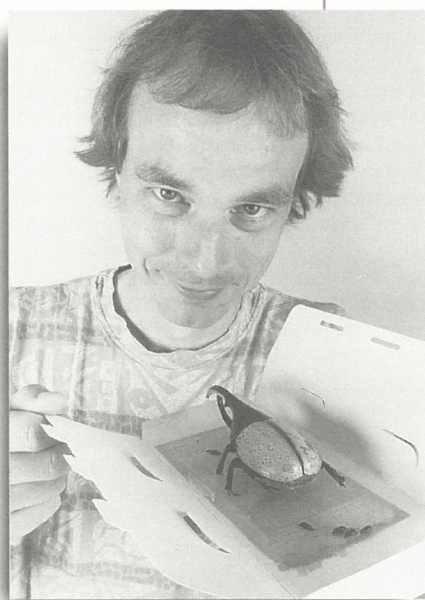
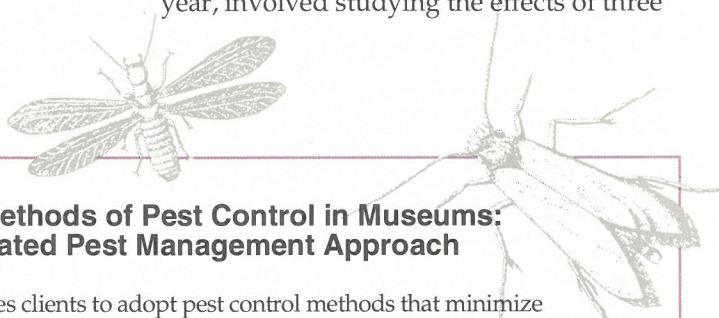
*Rust Converter Project:* This project was completed and the data was published in 1994. As a result of this project, CCI is now able to advise on a number of problems related to metal coatings.

### **Earth Pigment Research**

Research into the iron oxide pigments collectively known as "earth pigments" (e.g., ochres, umbers, and siennas) is well underway. These important pigments have been in use since earliest times by virtually every culture in all parts of the world. The research project is multi-disciplinary, combining analytical chemistry, geology, and historical research. Results of this work will be published in Volume 4 of *Artists' Pigments: A Handbook of Their History and Characteristics*.

### **Mass-Deacidification**

Three phases of the Mass-Deacidification Project, sponsored by the Metro Toronto Chairman's Committee for the Preservation of Documentary Heritage, are now complete. Phase III, which ended this year, involved studying the effects of three



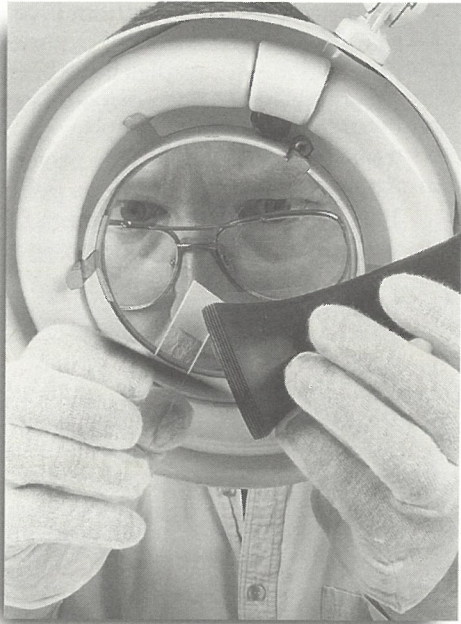
### **"Green" Methods of Pest Control in Museums: The Integrated Pest Management Approach**

CCI encourages clients to adopt pest control methods that minimize hazards to the environment, to artifacts, and to museum workers. One aspect of this work has been to assist museums in implementing integrated pest management plans. Inevitably, however, infestations occur from time to time, so research continues into less toxic ways of exterminating insects.

Temperature extremes are being used increasingly by museums to eradicate pests. CCI has published a large volume of data on the efficacy of high and low temperatures to kill museum pests, and further data continues to be accumulated. Work also continues on investigating the effects of high and low temperatures on artifacts. Not all museum objects can tolerate temperature extremes, so an increased interest in inert gas fumigation has developed. A study of carbon dioxide, nitrogen, and argon indicated that carbon dioxide is the easiest to use and the least costly.

*Infestations often go unnoticed until institutions set traps.*

commercial processes (Wei-T'o, FMC, and AKZO) on coated papers, photographs, architectural drawings, binding materials, labels, and media. All processes damaged materials to some extent, but some materials such as pencil crayons, some drawing inks, colour laser copies, dry-transfer media, new vellum, and acrylic coatings on book covers were more affected (a more complete list is available upon request).



*Identifying the plastic in an artifact by doing a spot test.*

### Permanent Paper

CCI is a participant in the Canadian Cooperative Permanent Paper Research Program, along with the Pulp and Paper Research Institute of Canada (Paprican). The project aims to establish scientific certainty about the impact of lignin on paper permanence in order to provide a basis for preparing a Canadian permanent paper

standard. This program is funded by the Canadian and Alberta governments, the National Archives and National Library of Canada, and a consortium of pulp companies including Dupont Canada, Fibreco, Louisiana Pacific, Millar Western, Quesnel River, Slave Lake, and Tembec. For the study, CCI conducts chemical analyses and accelerated aging of papers. It was discovered that standard techniques for determining molecular weight and carbonyl content, which are sensitive degradation indicators, were unreliable with lignin-containing papers. CCI has developed new procedures to overcome these difficulties.

Also this year, CCI made a bid to take part in a major component of a permanent paper project that is funded through the American Society for Testing and Materials.

### Plastics and Resins in Conservation

CCI's interest in the problems of modern materials in museum collections continues to develop. Five chapters of a book on the use of plastics in conservation have been completed and are ready for publication. A simple procedure was developed to distinguish ebonite (vulcanite), which can emit acid, from phenolic resin (bakelite), which is benign. Epoxidized soya-bean oil, a plasticizer that can absorb acid, was shown to be unsuitable for conserving degrading cellulose nitrate.



*Materials have been assembled for testing in CCI's new adhesive project.*

### New Directions in Adhesive Research at CCI

A new adhesive project has begun that builds on past CCI studies of poly(vinyl acetate) (PVAC) emulsions. This earlier work indicated that vinyl acetate/ethylene (VAE) copolymer emulsions have the potential to be excellent adhesives for conservation because many VAE emulsions were identified as having good properties for this purpose. Nevertheless, there are still problems. For example, one product that was identified as being suitable has a strong odour, while another is no longer available. Thus, the search for a good PVAC emulsion continues with a more detailed study of VAE copolymers and their additives. The new project will examine the effects of adding known quantities of various common modifiers on the stability of a well-characterized, relatively pure (i.e., no modifiers added by the manufacturer) VAE copolymer emulsion.

The benefits of this project to the conservation community are many. The research will add to the body of fundamental knowledge on VAE copolymers and their additives. As well, it will allow conservators to know with more certainty whether additives are detrimental or tolerable in emulsion formulations. Finally, it will give conservators the ability to formulate their own emulsion products with properties tailored to specific needs.

## Services to the Museum Community

A large portion of staff time is spent responding to requests from the museum community for scientific assistance and for advice. Activities include analytical services, specialized treatment consultations, museum and site visits, and the loan of environmental monitoring equipment.

### Scientific and Technical Services

*Analytical Services:* Staff of the Analytical Research Services Division (ARS) conduct scientific documentation for all of CCI's examinations and treatments. In 1994, this included post-treatment photography of the Royal Ontario Museum's Gondar Hanging, x-radiography of a walnut throne for the Montreal Museum of Fine Arts, and extensive photographic documentation of a horse specimen (*equus lambeii*) from the Yukon and of an Indonesian shadow puppet.

Approximately 100 analyses, many lengthy and complex, were done for public institutions. ARS also accepted payment to complete analyses for private individuals. In addition, ARS responded to 50 requests for advice.

Analyses of paintings and polychromes included *The Modest Model* by Paul Peel, for the London Regional Art Gallery; *Salvator Mundi* by Francesco Solimena, for the Art Gallery of Nova Scotia; the altarpiece from the Cathedral of Saint-Germain de Rimouski; and the main retable of the Ursulines Chapel in Quebec City. Six paintings, including two portraits by Paul Kane, were examined for the National Gallery of Canada. Conservation problems in contemporary art were addressed in studies of paintings by Ava Christl and prints by Harold Town.

Other studies that were undertaken included photographs for the National Gallery of Canada and the Canadian Centre for Architecture; archaeological artifacts for the Centre de conservation du Québec, Sainte-Marie Among the Hurons, the Canadian Museum of Civilization, and the Royal Ontario Museum; early measuring instruments from the Petrovic Collection for the National Museum of Science and Technology; and skeletal remains of a soldier buried at Annapolis Inlet, Nova Scotia.

A collaborative study began of arctic copper artifacts. Partners in this venture include the Prince of Wales Northern Heritage Centre, the Archaeological Survey of Canada, McGill University, and the Universities of Toronto and Calgary.

*Specialized Consultations:* The Conservation Processes Research Division responded to 84 requests for information or aid. Of these, 23 concerned the suitability of materials for use in collections (e.g., the Centre de conservation du Québec asked about selecting synthetic batting for stuffing textiles), and 19 concerned materials for use in photographic or audio-visual conservation (e.g., the National Archives of Canada posed a question on the longevity of CD-ROM and master tapes). Other requests concerned colour or gloss measurements, metal conservation, paper conservation (e.g., evaluating new fluorocarbon mass-deacidification solvents that meet the Montreal Protocol), and parylene treatment (including archaeological basketry for the Museum of Anthropology, University of British Columbia).

The Environment and Deterioration Research Division handled over 475 requests for advice, of which 105 concerned preventive conservation (e.g., a preventive conservation risk analysis was done for the Seagram Museum in Waterloo, Ontario), and 108 concerned adhesives. Inquiries ranged from suitable adhesives for herbaria to the composition of a cement curing agent for the new National Archives of Canada building in Gatineau, Quebec. There were 78 requests for loans of monitoring equipment. Other questions covered diverse topics including insect pest control, selecting ultraviolet filters, packing and padding artifacts for shipment, suction tables, and gallery lighting.

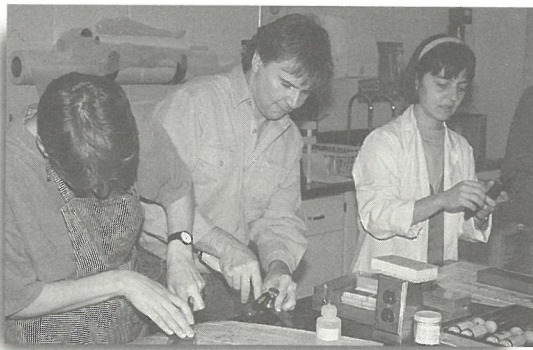
### Museum and Site Visits

CCI conservators visited a number of institutions to provide advice on conservation topics. In 1994-95, these included visits to the Hastings County Museum, the Musée des Augustines de l'Hôtel-Dieu, the Sharon Temple Museum, the Basilian Fathers Museum, and the Royal Canadian Artillery Museum. Advisory visits were also made to several museums with industrial collections, and on-site support was provided to important archaeological excavations.

One unusual site visit involved staff from CCI and the Canadian Museum of Civilization assisting the Sisters of Charity of Ottawa. Conservation professionals sifted through soil exhumed from the grave of Mother Elizabeth Bruyère, the founder of the Ottawa chapter of the Grey Nuns and a candidate for canonization, to remove small pieces of human bone and artifacts.

## Heritage Services Division Transferred to CCI

In the fall of 1994, the Heritage Services Division of the Department of Canadian Heritage was transferred from the Heritage Branch to CCI. The Division, which has been incorporated within CCI's Conservation Services Directorate, provides development planning and specialized technical design services to the Department and its clientele in the museum and heritage communities. The move was made to recognize and increase the existing interaction between Heritage Services and CCI, and to underline the key roles that project planning and the structural and equipment systems design of buildings play in collection preservation concerns. This initiative allows CCI to expand the range of collection preservation



Participants in a furniture workshop at Queen's University.

services it can offer, both nationally and internationally.

In 1994-95, staff of the Heritage Services Division provided a variety of services to 127 different client organizations. These included 66 site visits, over 75 Movable Cul-

tural Property Designation reviews, and more than 50 assessments of Museum Assistance Program applications.

### Seminars and Workshops: Investing in People

CCI continued its popular series of seminars and workshops on preventive conservation by offering two seminars to each province and territory. A total of 340 museum and art gallery workers attended one of these regular seminars.

A very significant training event during the past year was the *Varnishes: Authenticity and Permanence* colloquium and workshop (see "Conferences" section).

Workshops were held for students in various conservation training programs. A five-day furniture workshop and a workshop on artifact mounting were given for students of the Art Conservation Techniques Program at Sir Sandford Fleming College. The furniture workshop was also given to students of the Master of Art Conservation Program at Queen's University. A seminar on methods for examining and analyzing

museum objects was presented to students of the Museology Program at the Université Laval. A seminar on materials for the display, storage, and transportation of artifacts was given to students of Museology at Algonquin College.

Conservators and conservation scientists from CCI presented a two-day workshop on preventive conservation to members of the Aboriginal Training Programme at the Canadian Museum of Civilization. Also, one of CCI's senior archaeological conservators gave a three-week course at an archaeological site near Iqaluit, Northwest Territories, as part of a field school sponsored by Arctic College.

### Internships and Fellowships: Transferring Skills and Extending Relationships

CCI's Internship Program has focussed on transferring conservation skills and expertise to students of conservation training programs and to experienced practitioners. Two interns from Canada and seven from other countries received practical training or special skill development at CCI during 1994-95.

Over the past nine years, the Fellowship Program has been highly successful in allowing conservators and conservation scientists to develop their skills and to gain experience. This past year, it became necessary to review this program in light of continuing budget cuts. After careful consideration, it was decided that the Fellowship Program will be discontinued at the end of the 1995-96 fiscal year. During the coming year, other ways to fund this program will be studied. It is hoped that conservation training institutions and other interested parties will participate in finding a way to reinstate the program some time in the future.

### Tours and Public Awareness

CCI's laboratories and workshops are open to the public by appointment. Tours promote public interest in conservation and help students of conservation and museum studies programs understand an important element of the museum profession. A total of 14 organized tours were held during 1994-95. Throughout the year, the number of visitors more than doubled to a total of 772. This increase is largely due to tours associated with the IIC Congress that was held in September (see "Conferences" section) and the CCI Open House that was held as part of the national Heritage Day celebrations.

## Conferences

### IIC Congress

The 1994 Congress of the International Institute for Conservation of Historic and Artistic Works (IIC) was held in Ottawa from September 12 to 16, 1994. The five-day Congress attracted over 600 delegates from 48 countries. The program for the conference was extremely full, with 47 papers being presented



Booth at the IIC trade show.

over a period of four-and-a-half days. This is the first time that this international Congress has been hosted by Canada, and CCI staff played a prominent role in its organization and execution.

The theme of the Congress — *Preventive Conservation: Practice, Theory & Research* — is particularly relevant in these times of budgetary restraint, not only in Canada but in many other countries as well. Routinely slowing deterioration by passive means will diminish the need for active conservation and will allow the thinly stretched resources available for conservation to be concentrated where they are needed most.

The trade show and poster session associated with the Congress were also very successful, and won praise from exhibitors and delegates alike. There were over 35 participants in the trade show, with a mix of commercial exhibitors and Canadian conservation-related "showcase" booths.

Delegates had the option of participating in one of nine afternoon tours of various conservation facilities in the National Capital Region. This gave Canadian museum workers the opportunity to welcome international delegates into their own facilities and to demonstrate the kind of work that they do.

IIC Congress 1994 was an outstanding success and the host institutions were extremely pleased to be involved.

### Varnishes Colloquium and Workshop

From September 19 to 22, 1994, immediately following the International Institute for Conservation of Historic and Artistic Works (IIC) Congress in Ottawa, CCI hosted *Varnishes: Authenticity and Permanence*, an international colloquium for paintings conservators. An audience of almost 200 met in the auditorium of the National Gallery of Canada to hear 13 speakers cover a wide range of issues concerning the varnishing of oil paintings. This was a truly international event: among the audience were conservators from 18 countries, and among the speakers were representatives from England, France, Holland, the United States, and Canada.

The objective of the colloquium was to offer paintings conservators, curators, and art historians an opportunity to review current practices in the varnishing of paintings, to consider historical varnishing practices, and to compare the two.

A two-day practical workshop followed the colloquium. Due to the logistics of offering hands-on participation with a large variety of traditional and modern varnishes, the workshop was limited to 20 participants. Some speakers from the colloquium were present to demonstrate techniques and to provide additional information. Each participant received 14 artist's boards that had been prepared with oil paint or with acrylic.

The audience was enthusiastic about the presentations and the theme of the colloquium, and workshop participants voted the event a success. The response was so overwhelmingly positive that there are plans to hold the workshop again.



Participants at the Varnishes workshop.

---

## Library

### Databases

The Library continued to add new records to the bibliographic databases: 746 records to BMUSE (museology); 714 records to BCIN (conservation); and 990 records to SYDNEY (in-house catalogue). Institutions connected to the Canadian Heritage Information Network (CHIN) or to the Internet can access BMUSE and BCIN.

### Reference and Interlibrary Loans

Library reference staff responded to 1,100 requests from Canada and around the world for information. Some interesting requests included bibliographic searches on BMUSE and BCIN related to Japanese gold leaf, deleterious effects of correction fluid on paper, guidelines for developing collection and travelling exhibition policies, cleaning watercolours, and Polynesian tapa and mamaki.

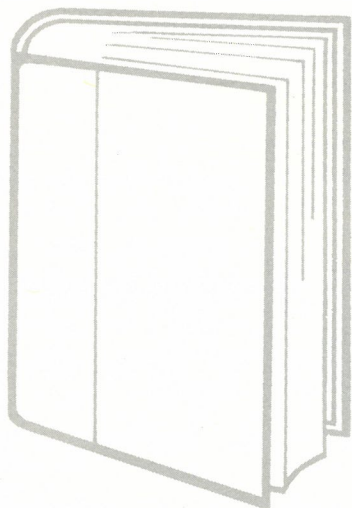
There continues to be an increase in requests for loans of the Library's collections.

In 1994-95, 1,083 items were loaned to the public, up from 840 items last year. This higher volume of lending is a good indication that CCI's holdings are increasingly being recognized as a major collection and a unique resource for the museum and research communities. The Library also increased its borrowing to 737 items for internal use. A total of 2,700 items were circulated to CCI staff this year.

There were 445 visitors to the Library, a substantial increase from the 338 who visited last year. Researchers came from all over Canada, as well as from Argentina, Australia, Japan, New Zealand, and the U.S.A.

### Acquisitions, Cataloguing, and Indexing

The Library purchased 470 new documents, down 190 from last year due to budget cuts and the escalating cost of publications. A total of 560 documents were catalogued, and 3,093 items were indexed.



---

## Publications

Last year, CCI responded to over 2,400 individual requests for publications from its many clients worldwide, including academic institutions, libraries, museums, conservation laboratories, and conservation specialists. CCI also acquired a number of important distributors for its products in the United States and the United Kingdom in an effort to increase the dissemination of conservation information.

CCI had a booth at the International Institute for Conservation Congress trade show in Ottawa (see "Conferences" section). A very successful promotional and sales effort was made for CCI books and publications, and for other specialized conservation products.

A review of CCI's automated mailing system was completed, and significant cost savings were achieved by instituting new processes.

CCI examined the implications of charging for CCI Notes and Technical Bulletins. It was

concluded that these publications could no longer be provided free of charge to clients outside Canada. Consequently, a price structure will be implemented in 1995-96 for overseas and American clients.

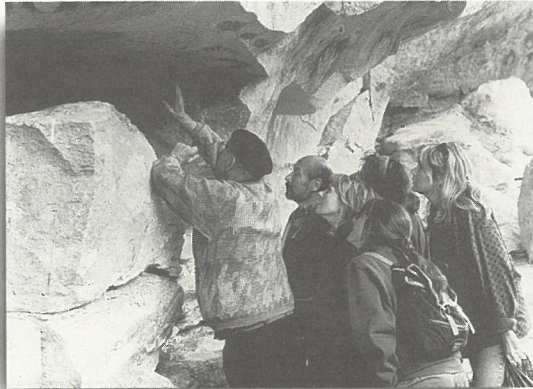
A total of 17 new or revised CCI Notes and two CCI Newsletters were distributed. In addition, a Technical Bulletin entitled *Care and Preservation of Firearms* was published.

A major publication achievement was the production of the poster *Framework for Preservation of Museum Collections*. This poster is an extremely useful tool for identifying risks to museum collections and for suggesting appropriate methods of control. The production of this poster represented the culmination of efforts by a multidisciplinary team of conservators, conservation scientists, editor-writers, and a graphic designer working together at CCI to advance conservation knowledge and excellence.

---

## International Services

In 1994, CCI received consultation and service requests from more than 29 countries: 239 from the U.S.A., 31 from the United Kingdom, 13 from France, 44 from other European countries, 5 from the Middle East, 5 from Central and South America, and 13 from Australia and New Zealand. These requests included examining a kayak from a collection in Rennes, France; using x-radiography and x-ray spectrometry to analyze two bronze arrowheads from the Museum of Fujairah in the United Arab Emirates; analyzing early Islamic and Roman fresco fragments from the Humeima Excavation Project in Jordan; and advising



*Members of the project team at La Cueva de las Manos.*

on the treatment of a waterlogged 5,300-year-old basket from Alaska.

During 1994-95, CCI staff members were invited to speak at numerous international

meetings and colloquia. Often, the expenses associated with their attending these events were recovered.

Ian Wainwright gave a seminar on rock art conservation at the Instituto Nacional de Antropología y Pensamiento Latinoamericano in Buenos Aires, Argentina. A collaborative project on the Documentation and Preservation of Argentinean Rock Art was begun with the examination of two sites in Santa Cruz Province, Patagonia: *La Cueva de las Manos* and *Cerro de los Indios*.

Réjean Baribeau made a number of demonstrations of the laser scanner, including one at the Showcase that supplemented the G7

Ministerial Conference on the Information Society in Brussels.

David Grattan presented a paper on the Canadian Cooperative Paper Research Program in Philadelphia at the ASTM Institute for Standards Research Workshop on the Effects of Aging on Printing and Writing Papers.

Jean Tétreault taught courses on materials at the Association des restaurateurs d'art et d'archéologie de formation universitaire (AARAFU), the Textile Conservation Centre, the Historical Museum of Basle, and the Scottish Society for Conservation and Restoration.

Tom Strang gave presentations on pest control at the Pest, Insect, and Fungus Management Conference in Boston, and also at a conference in Indianapolis, Indiana, for commercial pest control companies and government agencies.

David Tremain presented lectures at a Disaster Preparedness and Response Workshop organized by the United States Parks Service in Williamsburg, Virginia.

Carole Dignard taught a three-week segment on preventive conservation and mount making at PREMA's regional conservation course in Madagascar.

Bob Barclay co-taught at a one-week course, entitled "Caring for Musical Instruments," sponsored by the Museums and Galleries Commission and held at the Horniman Museum, London, England.

Marie-Claude Corbeil presented a paper (co-authored by Jane Sirois) on x-ray diffractometry at the 4th Conference on Non-Destructive Testing of Works of Art in Berlin, Germany.

Staff also presented a number of other talks in the U.S.A., the United Kingdom, Japan, Sweden, Scotland, and Germany.

---

## Professional Affiliations

CCI represents Canada on matters relating to the conservation of moveable cultural property. Many staff members participate in the administration of professional associations related to conservation in Canada and abroad.

Charles Gruchy is a member of the Council of the International Centre for the Study of

the Preservation and the Restoration of Cultural Property (ICCRPM), and is also a member of the Program and Finance Committee.

David Grattan and Helen Burgess continued to serve on the Editorial Board of the *Art and Archaeology Technical Abstracts* (AATA) as Section Editors.

Staff from the Textile Laboratory were Contributing Editors for the AIC Textile Catalogue.

Helen Burgess was a voting member of the Canadian General Standards Board.

CCI staff continue to take part in the committees of the International Council of Museums (ICOM). The following representatives were active on the ICOM Committee for Conservation (ICOM-CC): Cliff McCawley was a member of the Directory Board, Ela Keyserlingk was Assistant Coordinator of the Textiles Working Group, Stefan Michalski was Co-Coordinator of the Working Group on Preventive Conservation, David Grattan was Coordinator of the Resins Group, and Tom Strang was Assistant Coordinator of the Biodeterioration Working Group. Bob Barclay was Secretary-Treasurer of CIM-CIM, the Musical Instruments Committee.

Tom Strang was the Associate Editor of *Collection Forum* and was Co-Chair of the

Conservation Research Subcommittee of the Society for the Preservation of Natural History Collections (SPNHC).

Staff were active in the International Institute for Conservation—Canadian Group (IIC-CG) in various capacities: Marie-Claude Corbeil served as Vice-President, Tara Grant acted as Secretary, Jean Tétreault was a Councillor, and Maureen MacDonald was Chairperson of the Membership and Directory Committee.

Staff members were involved on the Executive Committee of the Canadian Association of Professional Conservators (CAPC): Charlie Costain was Vice-Chairperson, Carole Dignard served as Secretary, and Ela Keyserlingk acted as Member-at-Large.

The Board of Trustees of the Hedley Research Fellowship Fund (Canada) included Debra Daly Hartin as Chairperson, Helen MacKay as Treasurer, and Bob Arnold and Stefan Michalski as Trustees.



---

## Administration

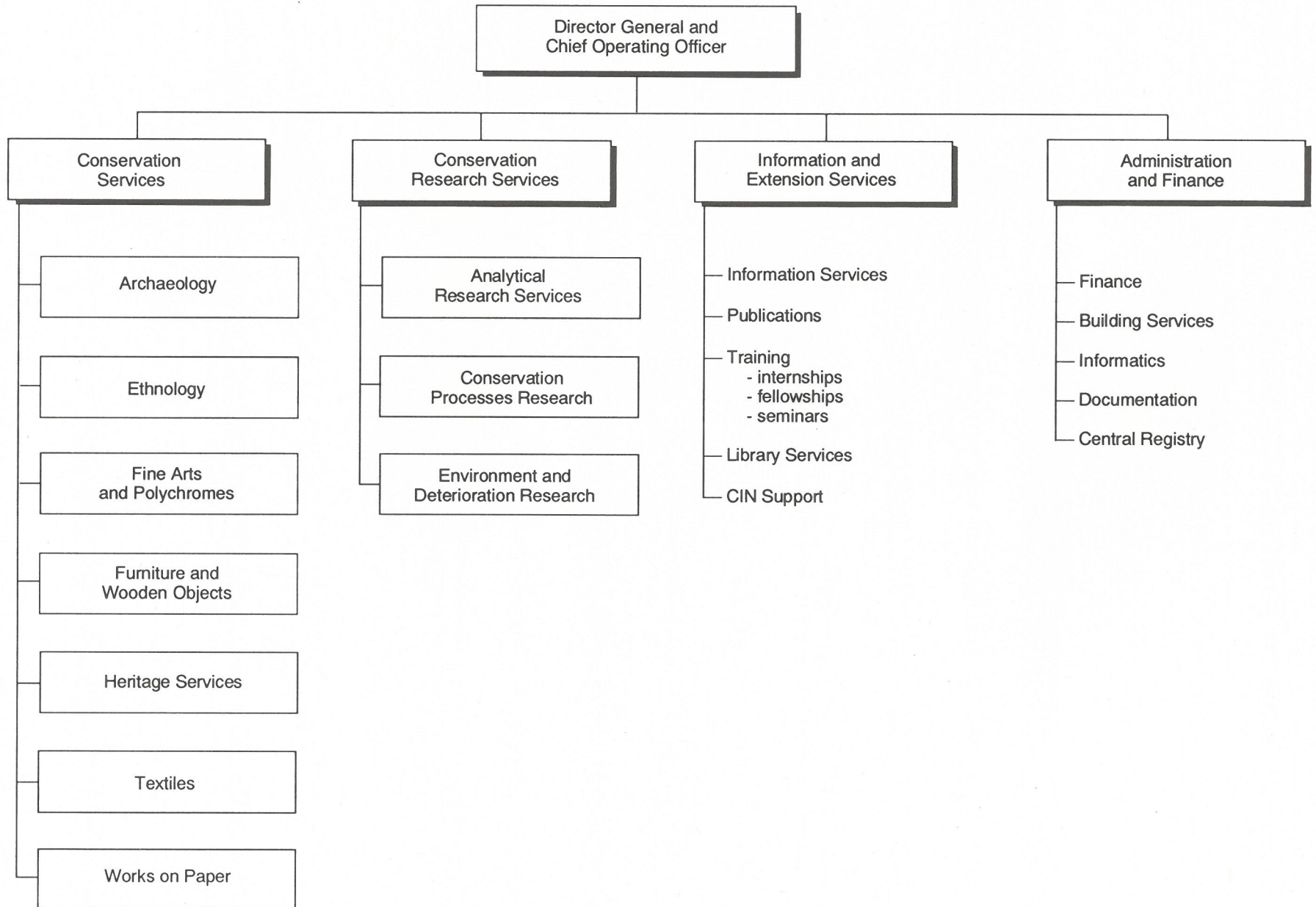
The Finance and Administration Directorate continued to support the operation of the Institute in the areas of finance, administration, and documentation.

A number of the recommendations that were made in the 1993-94 Administrative Review were implemented during this fiscal year, particularly in the areas of informatics and general administrative services. This has resulted in improved services to CCI employees.

Modifications were made throughout CCI's headquarters building in a continuing effort to improve access for the physically handicapped.

CCI is constantly looking for ways to improve communications and make staff more accessible to clients. Several new initiatives focussed on this goal. A voice mail system was installed to allow clients to leave detailed messages for CCI staff members, whose extension numbers are listed on the *CCI Staff List*. In an effort to retain a human element, a receptionist still answers and forwards calls. Also, staff members can now be reached by electronic mail through the Internet Network. Addresses are composed as follows by using the names of staff as they appear on the *CCI Staff List*: **firstname\_lastname@pch.gc.ca**. Clients are encouraged to use these new communications options, as well as the fax system already in place.

# Organizational Chart of the Canadian Conservation Institute



## Financial Statement 1994-1995

Full-Time Equivalents	87.9
Salaries	\$4,268,887
<b>Operating:</b>	
Postage and Freight	\$14,187
Communications	\$56,600
Information and Printing	\$32,495
Professional and Special Services <sup>1</sup>	\$503,613
Travel <sup>2</sup>	\$185,758
Rentals	\$19,483
Repair and Maintenance	\$58,380
Utilities, Materials, and Supplies	\$332,157
<b>Total Operating</b>	<b>\$1,202,673</b>
<b>Capital:</b>	
Acquisition of Machinery and Equipment	\$259,819
<b>Contributions:</b>	
Priority Conservation Projects and Canada's Membership Fee to ICCROM	\$256,846
<b>Total, Single Operating Budget</b>	<b>\$5,988,225</b>
<b>Revenue and Cost Recoveries</b>	<b>\$56,400</b>

*Note: This is not an audited financial statement.*

<sup>1</sup> Professional and Special Services include contractual work, Fellowships in conservation and in conservation research, consulting and advisory contracts, and some Priority Conservation Projects.

<sup>2</sup> Travel includes museum and site visits, conference attendance, professional association business, and travel for training and emergency services.