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CCI's Emergency Services

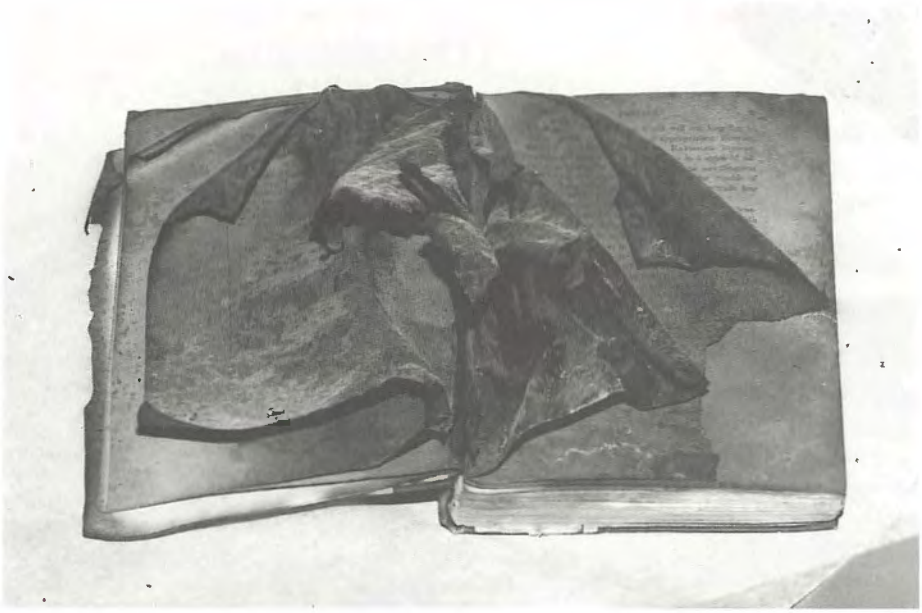
by Deborah Stewart

On the morning of Sunday, August 30th, 1992, the Commissionaire on duty at CCI received a phone call from the Billings Estate Museum in Ottawa requesting assistance after a fire that had occurred at the museum the night before.

CCI conservators were quickly notified and, after making contact with museum personnel, met at CCI to assemble equipment and supplies that would be required for the recovery of the collections. Recovery efforts were delayed for approximately 24 hours until the Fire Marshal's inspection could be completed. The cause of the fire: arson.

Fortunately, the local fire department had recently visited the museum (a historic house), and was familiar with both its layout and its contents. Firefighters were also aware of the special needs of the museum and its collections. This awareness resulted in very little water being used to extinguish the fire, which meant little water damage to the collections. Although the fire itself was mainly confined to one room, soot damage occurred throughout the museum.

CCI conservators spent the greater part of the next four days working with museum staff to remove charred and soot-damaged books, furniture, framed



Book damaged by fire while on open display in a museum.

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Conservator Fiona Graham removing soot from a glass bowl.

pictures, and ceramics from the fire site, and to determine ways to clean the artifacts. They then did as much in-situ cleaning of the damaged collection as possible. Several items that could not be cleaned on site due to their fragility, or that required more complex treatments, were taken to CCI.

While cleaning allowed most objects to be handled again, many will be permanently discoloured unless further complex treatments are undertaken. Most disheartening were the items that were damaged by heat or that were charred beyond repair. However, due to the quick response time of the fire department and the judicious use of water, damage to both the house and its contents was substantially less than it could have been.

Responding to Emergencies

Over the years, the Canadian Conservation Institute has responded to many emergencies by providing immediate "first-aid" advice to museum staff over the phone, or, if necessary, by sending conservation staff to assist with the salvage and recovery of collections. CCI provides this service free of charge for permanent cultural collections within Canada. Incidents have included major floods, damage from leaking pipes, and fires resulting from arson, gas explosions, and electrical sources.

In the event that an emergency or disaster should occur at your museum, call CCI immediately. The telephone number is (613) 998-3721; you may call collect. This number will connect you to the CCI switchboard operator. You may call at any time of the day or night, seven days a week. When you call, make it clear to the CCI operator that you have an emergency. During working hours, you will be connected immediately to someone who will be able to advise you. During non-working hours, be prepared to give the CCI operator the following information:

- your name
- the name and location of your institution
- a telephone number where you can be reached
- the type, extent, and severity of the emergency
- the nature of the collection and the degree of damage to it
- what action has been taken so far

This information will be conveyed to someone at CCI by means of a call-up list, and you will be contacted as soon as possible. If the damage is serious enough, or if you are without the assistance of a local conservator, it may be possible to have CCI conservators come to your museum to advise on the salvage and subsequent care of the collections. Following an emergency, it is important to stabilize the museum's environment and the condition of the collection as quickly as possible. The effort required to stabilize and recover your collection increases, and its effectiveness decreases, with each passing hour.

CCI's Involvement with Disaster Preparedness

In addition to responding to emergencies, CCI is also involved in **preparing** for emergencies and disasters at cultural institutions.

CCI is currently revising its existing *CCI Notes* on disaster management, and is considering new topics for publication, particularly in the area of the recovery and stabilization of collections. If you have suggestions for future topics on this subject, please contact the Extension Services Division of CCI.

CCI also offers a seminar titled "Emergency and Disaster Preparedness for Museums." This two-day seminar is given at the request of provincial or territorial museums associations, and covers all aspects of disaster preparedness and recovery of collections.

Over the years, these unique services provided by CCI have proven to be of great value to cultural institutions in all parts of Canada. ♦

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The Parylene Project: An Update

by David Grattan

The Parylene project was announced in the February 1989 issue of the *CCI Newsletter*, and you may have been wondering what has become of it since. Although a number of publications have reported some of our results,[1-7] all the information has not yet been released. But what have we found?

In a nutshell, we have observed that Parylene deposition can indeed strengthen fragile materials unobtrusively and in a manner unequalled by other processes. It can save items that would otherwise be utterly lost. It can be used in unusually small amounts and under rather controlled conditions compared to other consolidants. Thus, very little material is actually added by the process. The problem for conservators, however, is that application is irreversible. So, under what circumstances can it be used? To answer this question, I will briefly review and discuss the progress made in each of the three parts of the Parylene project.

The Fossil Forest

The primary aim of the project was to preserve delicate leaf and cone specimens from the fossil forest on Axel Heiberg Island in the Canadian Arctic. This has been successfully accomplished. With the assistance of Margaret Morris, a conservator on contract at CCI, we treated a substantial collection for the Canadian Museum of Nature, and smaller quantities for the Universities of Saskatchewan and British Columbia. The results were generally successful and have been published,[4] as was a description of the storage method for the Canadian Museum of Nature's cones.[7]

Applications of the Technique to Artifacts and Specimens

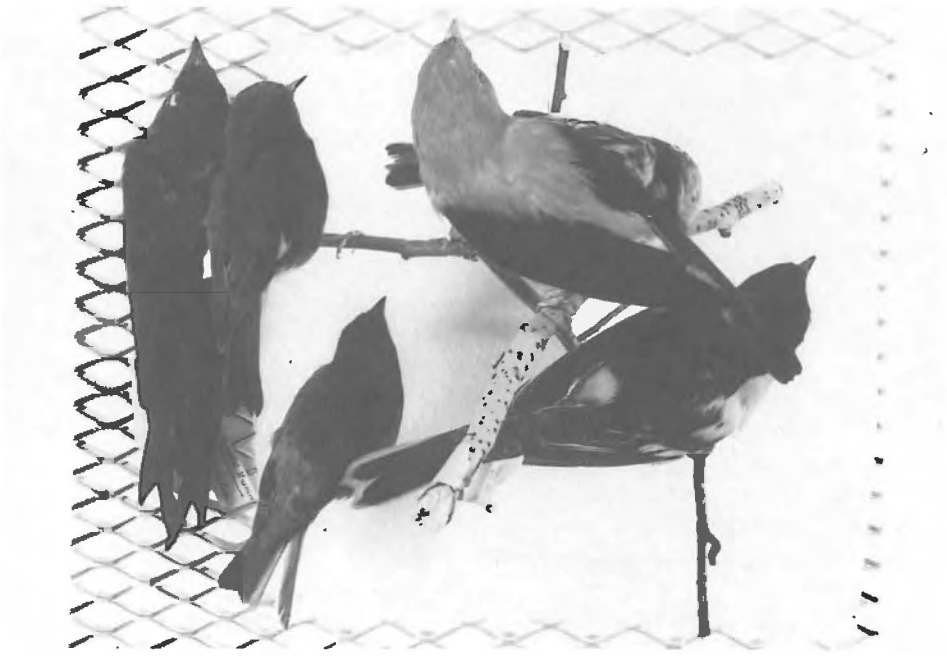
This aspect of the project involved the cooperation of a number of museums and archives from Quebec, Ontario, Manitoba, Alberta, Saskatchewan, and British Columbia as well as from other countries including Germany and the USA. A great many items have been treated with Parylene, and the results have been examined and commented upon by those who supplied test samples. All their comments and data are included in a report, which is still incomplete. Some parts of it, however, have been published,[1,3,5,6] and others, such as the evaluation of Parylene-coated textiles, are available upon request.

We have found a number of instances where this process can be of great use. The gross morphology of natural history specimens is important; hence, Parylene is useful. In simple terms, it's nice to be able to show insect specimens with the legs, wings, antennae, etc. still attached. We successfully consolidated various plant specimens, birds, insects, and a wide variety of marine items from crustaceans to sponges. The possibility of irreversibly damaging something unique is less of a concern for natural history specimens because museums rarely rely on single specimens. There are also many aspects other than just morphology that museums may wish to preserve. No single technique suffices — or has ever sufficed — to preserve all of these facets. Thus, using a range of preservation techniques is a sensible approach and one into which Parylene can be fitted without ethical difficulty.

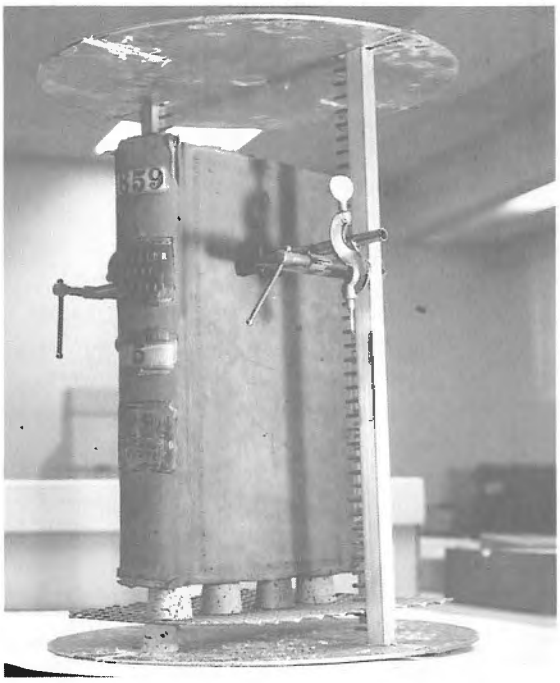
Another area of potential use is with diorama display items. Not only does Parylene allow delicate items such as flowers or leaves to be prepared for such use, it also allows them to be cleaned easily by washing them with hot soapy water or even with commercial dry-cleaning agents. Coated specimens are also more likely to survive the stresses of being in travelling exhibitions.

Parylene has found application for artifacts that are to be used for didactic purposes or that are reaching the desperation stage. Examples of the latter are vestigial archaeological textiles, charred fibre samples, and degrading and crumbling 20th-century materials such as foam rubbers (for example, in radio equipment, puppets, and dolls).

One rather interesting use shows some of the unique potential of Parylene. Recently, Parylene was used to aid in the reversal of another treatment. In the Historic Resource Conservation Laboratory of the Canadian Parks Service, Environment Canada, Ottawa, conservators wished to remove alum during the reconservation of some wooden artifacts. Attempts to soak out the alum in water



Coating diorama specimens, such as these birds, with Parylene gives them better protection in travel, makes them much easier to clean, and increases their useful display life.



A ledger with red-rot about to undergo a test coating with Parylene.

were unsuccessful because the degraded wood ended up as pulp. Clifford Cook, of the Historic Resource Conservation Laboratory, had the idea of using a Parylene coating to keep the wood intact during the soaking period. This worked very well: the thin Parylene coating allowed the alum to diffuse out, yet held the wood together. Thus, irreversible Parylene deposition allowed another "irreversible" process to become reversible. (Heaven only knows what this means for our conservation codes of ethics, which are rather dogmatic about reversibility!)

Another possible application is in consolidating 19th-century red-rotted ledger bindings, which was achieved without coating the paper inside. This process could enable the salvage of such bindings, which are now written off when re-binding is carried out.

In the course of our study, we did a few successful consolidation tests with burnt paper for Don Purdy of the RCMP forensic laboratory. Then, on March 10, 1989, an Air Ontario Fokker F-28 crashed in Dryden, Ontario. Shortly thereafter, CCI received a request from the Canadian Aviation Safety Board (now the Transportation Safety Board of Canada) to freeze-dry the soaked and charred logbooks from the plane. Parylene coating proved very useful; it strengthened the burnt pages sufficiently for the books to be separated page-by-page, and permitted a high recovery of evidence that apparently proved useful in the enquiry.

Aging Properties of Parylene

The third aspect of the project has been to characterize the aging properties of Parylene films. Initially, we conducted a thermal study to measure stability in the absence of light. Initial results, which were published in 1991,[2] predicted an extremely long period of stability of the order of thousands of years. More recent longer-term studies at lower temperatures (unpublished) predict somewhat shorter useful lifetimes. What this may mean in practice is not yet certain, but at the moment we think that it is unlikely to alter current criteria for the adoption of Parylene in conservation.

Light aging experiments are also in progress. Early studies showed that Parylene could be degraded by light, and that Parylene N was much more sensitive than Parylene C. The effects of aging were primarily physical; there was only very slight yellowing. Films embrittled and fractured more easily after exposure to high light intensity. This work continues, and we hope to be able to determine quantitatively how long and under what conditions it is possible to expose Parylene to light.

The Future

Generally speaking, the project has been a success. The position now is that the Parylene coater — which will permanently reside at CCI — is available for tests for any Canadian museum and for treating artifacts or specimens as required. If you wish to try coating a test object or if you simply want to know further details about the process, please get in touch with David Grattan at CCI.

Acknowledgement

We thank Bruce Humphrey of Speciality Coating Systems, Union Carbide Corporation, for his assistance during all phases of this project.

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The People Behind the Scenes

by Sandra Steiman LaFortune

When people think of CCI, they usually think of the conservators who carry out complex treatments of artifacts, the conservation scientists who solve some of conservation's most perplexing problems, or the training presentations CCI offers to museums and galleries across Canada. However, there is a team of people working in the background who the conservators and research scientists rely upon, and without whom activity at CCI would grind to a halt — the staff of CCI's Building and Administration Services Directorate.

Building and Administration Services staff provide all the support services for the conservators and conservation scientists at CCI. They take care of essential services, like documenting all artifacts being treated or studied, purchasing supplies, monitoring budgets, maintaining the building, and doing the word processing of reports and documents.

Sue Wilson, as Director of Finance and Administration, manages the staff of this directorate, and monitors CCI's overall budget resources. With the help of her administrative assistant Rachelle Knight, Sue looks after budgets for salaries, general purchasing, and capital equipment. She oversees all financial matters, liaises with departmental headquarters, and prepares the myriad of financial reports necessary for the government's central agencies. Working with Sue is Peggy Wynne, CCI's Purchasing Officer. Peggy orders all supplies from the paintbrushes to the X-ray Diffraction Unit, and is the custodian of the petty cash (which makes her one of the most popular people in the building!).

The Documentation Section is responsible for the records related to the receipt, treatment, and return of artifacts, as well as for the central registry and the mail services. Suzanne Lalonde, the Registrar and Chief of Documentation, along with Ray Dorion, the Assistant Registrar, ensure that meticulous records are created and maintained for all artifacts in the building. These dossiers contain all pertinent information related to each artifact, including legal forms, condition upon arrival, photo documentation, and treatment records and reports. As well, the whereabouts of each artifact is tracked from the moment it arrives until it is returned to its owner. In addition, John Egan, the Central Registry Clerk, maintains all the operational and program files, and deals with the mail, faxes, messengers, etc. that are such an integral part of running the Institute.

As Chief of Building Services, Jacques Richer is responsible for coordinating all building repairs and maintenance. Jacques arranges for everything from moving furniture and general cleaning to having telephone lines, fume hoods, and "elephant trunks" installed. Currently, CCI's building is undergoing some major renovations, and Jacques is being kept quite busy overseeing this construction project. Jacques is assisted by Craig Lauber and Bob McRae, the other members of the Building Services team. Craig is the Storeperson, and is responsible for stocking and distributing the general supplies and for chemical storage and removal. As Preparator, Bob arranges for shipping artifacts to and from CCI and for the special crates necessary to ship them. Also, whenever a special conservation apparatus such as, for example, a stand, frame, stretcher, etc. is required to carry out a particular procedure, Bob is the person who builds it.

It is no surprise that a lot of paperwork is involved in running an organization like CCI. This at times mundane task is made considerably less onerous thanks to Lucie Forgues and Denise Lévesque, our Office Equipment Operators. Lucie and Denise do the word processing for everything from treatment proposals to reports, appraisals, mailing lists, letters, etc.

Last, but certainly not least, Systems Analyst Jean Bisson is responsible for keeping CCI's electronic data processing up and running. Jean takes care of all the computers and software used in the building, coordinates the LAN system, and does some programming and lots of trouble shooting. With the large role that computers play nowadays in everything from scientific analysis to preparing notes for talks, Jean is kept pretty busy.

The staff of Building and Administration Services are, in many ways, the grease that keeps CCI's gears running smoothly, and their functions are integral to the workings of the Institute. So the next time you think of CCI, don't forget the people behind the scenes who help to make it all happen. We couldn't do it without them! ♦

CCI Becomes a Special Operating Agency

by Charles Gruchy

On November 19, 1992, the Treasury Board approved the submission from CCI making it a Special Operating Agency (SOA). In the *CCI Newsletter* last October, I said that becoming an SOA would not mean that CCI would have to recover costs for services to Canadian museums. I want to reinforce that statement and to say that in the Framework Document, which is the terms of reference under which CCI will work as an SOA, one of the objectives is that CCI will "provide conservation services free of charge to eligible Canadian public institutions." "Eligible" has been defined in such a way that it includes all of the clients CCI has served during the last 20 years, so no one with whom we have been dealing should find any change. New museums that meet the criteria will also be eligible to receive CCI services free of charge. There are no plans to change any of the programs we currently have in place.

One thing that CCI now has authority to do is to recover costs from "non-eligible" clients, for example, foreign institutions or private organizations and institutions in Canada. However, CCI can only engage in those kinds of activities if they do

not interfere with the primary mandate of providing service to the museum community and if CCI does not compete with private conservators. CCI will not be competing with the private sector and will continue to focus the majority of its activities within Canada.

Another authority that will simplify the environment in which CCI works is that we will be able to carry some of our budget over from one fiscal year to the next. This should give us an opportunity to manage our activities in a more businesslike manner and avoid the need to rush through projects as we approach the end of March. We will also be able to accept funds from agencies to carry out projects on their behalf. For example, we will now be able to undertake contracts to do research on such things as alkaline papers or corrosion studies of outdoor sculpture.

Many of the authorities that have come to CCI were negotiated within the Department of Communications, and are designed to make the administrative tasks of CCI simpler and contained within the Institute. For example, purchasing authority for CCI now rests completely within the Institute, which should allow us to deal with that activity more effectively. CCI is now completely responsible for the training and professional development of its own staff, and is also responsible for its own travel authority, which will simplify the process staff must go through to attend conferences and meetings.

The Framework Document to which I referred earlier is a public document, and a copy will be made available to anyone who writes to request one. It explains the system under which CCI will operate as an SOA.

It will probably take a number of months for us to completely understand the implications of being an SOA, and perhaps even longer to know how to use our new authorities to best advantage. Nevertheless, most people will not see any substantive changes in the way CCI operates, except that we hope to become even more responsive to the needs of the museum community. ♦

Dr. Ken Macleod Retires: A Tribute

At the end of August 1992, Dr. Ken Macleod retired as Director of Conservation Research Services (CRS) for the Canadian Conservation Institute. Ken joined CCI in August of 1973 as Chief of the Environment and Deterioration Research Division. In 1976, Ken was appointed Director of CRS, a position he held until he retired.

What follows are tributes from some of Ken's colleagues on the occasion of his retirement.

As Director of Conservation Research Services (CRS), Ken Macleod was largely responsible for the many significant successes of CRS scientists over the years. In fact, in a quiet way, Ken brought about considerable change at CCI. He initiated the three successful research groups that met and communicated with our clients across the country and that helped formulate our research policy and plans. The results of this research are reported in the Annual Research Reports, which were another innovation of Ken's. In a similar way, Ken helped formulate the CCI publications policy, and was instrumental in starting the very successful series of international symposia organized by CCI.

Over the years, Ken has struggled with the complex problems associated with managing research in the government bureaucracy of today. That we have survived and, indeed, flourished speaks volumes for Ken's success. He fulfilled the many purely bureaucratic functions necessary in a large and diverse entity such as the federal government, and at the same time created a stable work environment with considerable freedom for CCI scientists to pursue their research. Above all, those who have worked closely with Ken speak with much admiration and affection of his qualities as a person. First and foremost, Ken cared for the welfare and happiness of his staff, and always provided leadership and wise counsel.

J. Cliff McCawley
A/Director, Conservation Research Services
Canadian Conservation Institute

Perhaps one of the greatest strengths of CCI is the combination of conservators and scientists working under one roof to achieve a common goal — the advancement of conservation. The effectiveness and success of this working environment would be diminished considerably if there were no support from management. Ken believed in strong collaboration between scientists and conservators, and encouraged the exchange of ideas and information between them. He supported projects and initiatives that involved both professions. He recognized that input from conservators was necessary to ensure the relevancy of the scientific research carried out by his staff. I have had the opportunity of working on both sides of the fence, so to speak. I can attest that one of Ken's priorities was to ensure that the fence door was open wide and opened freely. As an example, Ken put together research working groups, consisting of both scientists and conservators, to review and prioritize research needs across Canada.

On a more personal note, my own advancement through the ranks of CCI (starting as a mere contract chemist in 1972) might not have been possible without Ken's continuous support and encouragement. That support was strongest, and certainly most appreciated, when in 1986

my name was suggested as a possible candidate for the then vacant position of Director, Conservation Services. I can only say thank you, Ken, for that particular vote of confidence, and for the many others during your years at CCI.

Raymond Lafontaine
Director, Conservation Services
Canadian Conservation Institute

In August, Ken Macleod retired from CCI and the public service. I had the privilege and the fun of working with him for ten years when CCI was part of the National Museums of Canada (of more-or-less blessed memory). Now, Ken is a scientist and I am not, so I will leave it to others to point out his scientific accomplishments, which I believe to be many. I have something different in mind.

My subject in relation to Ken is the matter of the "expert manager", of which Ken is one. Perhaps a better syntax would be "manager of experts"; that more accurately describes what it is that Ken did. The public service contains masses of what might be generically and not unkindly described as administrators, and pockets of highly skilled, often particularly trained experts. Often, it is the former who manage the latter; many badly, a few very well. But then, thank whatever cosmic power does it for you, there are a few Kens, a very rare breed, indeed: impeccable credentials in his field, positive criticism by the pound (oops! make that "kilo"), but yet willing to step forward when the good of the whole is at stake, to spend less time in the lab than he might have wished, but to take the time and trouble to understand that managers are necessary, and to be a good one, with the added, rare, and wonderful ability to comprehend the needs of his charges. CCI was a difficult idea to get going at first. It went down some blind alleys in the early days. Ken was one of those who saw the need to help and came forward. CCI has its highly valued, world-recognized status partly because of Ken Macleod. Thanks, Ken.

Bob Nichols
Canadian Centre for
Management Development

During the 16 years that Ken was Director of Conservation Research Services (CRS), the research program at CCI evolved from that of a relatively small and unknown laboratory to one of international stature. Not only did the size and expertise of the staff grow, so too did the diversity of projects. On both the national and international scene, it became recognized that art conservation research was an area in which Canada performed very well indeed.

Ken would neither claim nor accept credit for this achievement. He never became an officer of a professional organization and, apart from acknowledgements at the ends of papers, there are relatively few publications under his name. Yet, in business, academic, and research circles, it is well established that the success of an organization starts at the top. In my view, much of the success that CRS has enjoyed over the years was due to Ken's quiet and efficient leadership style — much more so than I think Ken or many colleagues recognized. Ken had a basic approach to managing research: hire the best people, select relevant research projects, and let people get on with the job. He always knew the status of the various projects but never looked over the shoulders of his Chiefs or staff as long as progress was being made. He had worked at the bench and knew that with research, things don't always work out as planned. He knew that scientists need time to read, tinker, and think, and we felt comfortable doing so. He provided an atmosphere that was conducive to good science. He knew the literature, and took time to review papers and reports personally. If a paper was "a crock" — as he liked to phrase it — he said so. Otherwise, he gave it an "O.K." and gave all the credit to the staff involved. If we could get a report by Ken, we felt it would likely be accepted anywhere.

In short, Ken Macleod built CRS into a world-class laboratory and was the glue that held it together.

John Taylor
Chief, Analytical Research Services
Canadian Conservation Institute ♦

CCI Turns Twenty: Let's Celebrate!

by A.P. Joe Dorning

Most birthday parties start and end on the same day, but occasionally the celebrations can go on longer. Indeed, Canadians celebrated Canada's 125th birthday for a whole year, so it shouldn't seem unusual for a unique institution like CCI to have had a 20th anniversary celebration and a birthday party that stretched over five months.

The party kicked off in early June with a group burger binge, a.k.a. the CCI Anniversary B-B-Q. This event was a huge success, and even torrential rains (typical of Ottawa in the summer of '92) couldn't dampen the enthusiasm of all who attended.

In July, conservators and conservation scientists from CCI and from other organizations in the National Capital Region came together for a talk by Dr. Mansfield Kirby Talley Jr. entitled "With Change in Your Pocket Under a Full Moon: The Eye, Heart, Mind, Hands, and Art." Dr. Talley gave a lively discussion of his views on such diverse issues as the education (or lack thereof) of art historians and conservators, the growing commercialization of museums, "exhibitionitis", art in its proper context, the threat of tourism to our cultural heritage, the obsession with management, the importance of a humanistic approach to works of art, connoisseurship, and the ever-present "myopia" of the conservation profession.

September set the stage for one of the most interesting, unusual, and humorous lectures ever presented at CCI. Gaël de Guichen, Head of the Collections and Museums Sector for ICCROM, treated us to his personal observations on the entire history and development of the "spaghetti hygrometer" from the time of the

Acting Deputy Minister of DOC Michael Binder, Director General of CCI Chuck Gruchy, and former Director of Conservation Research Services Ken Macleod cut CCI's birthday cake.

Renaissance to the present day. Gaël's talk was accompanied by many slides and enlightening illustrations, and by actual examples of the hygrometers themselves. The next day, Gaël presented a lecture in a more serious vein, entitled "The Prehistoric Cave of Lascaux: From Discovery to the Present." Again through the use of superb slides, we were able to see the brilliance of the artists who had painted the caves while Gaël described some of the conservation problems involved in protecting these paintings.

CCI plays host to many visitors in the course of a year, but there are few occasions when friends and family members of staff, as well as others who are interested in what we do, have the opportunity to visit our labs and see what is going on. So on the evening of September 29th, we opened our doors and welcomed over 225 guests to a gala "open house." Everyone got the chance to visit the research and treatment labs to see the tremendous variety and range of activities that take place at the Institute. Commemorative CCI lapel pins were handed out, and a day care (or evening care, in this case) was set up in the cafeteria to look after the youngsters. Refreshments were served, and a good time was had by all. We certainly appreciated our guests taking the time to come visit us and help in the birthday celebrations.

On Thursday, October 15th, the skies were overcast in the nation's capital (so what else was new?), but spirits were high at CCI. This was the day of the official 20th anniversary celebration. In honour of the event, The Captain — the statue that had stood for so many years in front of the building and that had begun to look a little the worse for wear — had been given extensive conservation treatment and refurbishing by Bob Barclay of the Ethnology Section and his colleagues. The restoration work and treatment on The Captain included painting, repairing the fibreglass and the base, and building a new cement base and a new raised limestone platform on which to place the familiar and revered figure.

The rededication of the "new and improved" Captain took place in front of CCI. Michael Binder, Acting Deputy Minister of the Department of Communications, and Chuck Gruchy, Director General of CCI, spoke eloquently of CCI's past contributions to conservation and of hopes for even more significant contributions over the next 20 years. The ceremony concluded with The Captain becoming the repository of a time capsule that included such things as lists of CCI staff members, past and present; abstracts, pins, and pens from Symposium 91; *Notes on Time Capsules*; a Library microfiche and a catalogue card; and a brief history and the conservation treatment record of The Captain. At the conclusion of this ceremony, CCI's new flag for special events, made by the staff of the Textiles Section, was raised to the top of the flag pole.

At noon, all of the CCI staff sat down to potluck luncheon, which was followed by everyone raising their glasses on high in a champagne toast and tribute to the Institute. The food at the luncheon was such a success that everyone wanted copies of all the recipes. Subsequently, a *CCI 20th Anniversary Luncheon Cookbook* was compiled and sold throughout the Institute, with all proceeds being donated to the Ottawa-Carleton Food Bank.

In the afternoon, current CCI staff members hosted a gala homecoming party for all past CCI staff, members of sister organizations such as the Canadian Heritage Information Network, members of the four national museums, and many others who came to honour and pay tribute to the Institute. Director General Chuck Gruchy read the many telegrams that had been received from people who could not attend the party but who wanted to offer their congratulations on this special day.

The memories will linger on for all of us who participated in the various events during the summer and fall of 1992. The memories will be especially warm for those lucky enough to be sipping coffee from a special edition CCI 20th anniversary coffee mug, or proudly wearing a special edition CCI T-shirt or sweatshirt, which were made and distributed in honour of the occasion. I am sure they are going to say, "Yes, I was there and it was quite a party!"

Happy birthday, CCI! May you have many more. ♦

Resurrecting the newly restored Captain.

Les Prairies: A Mural Painting by Alfred Pellan

by Helen McKay and Anik Morrow

In June 1992, conservators from CCI's Fine Arts Section undertook treatment of a large mural by well-known Canadian artist Alfred Pellan (1906-1988).

The oil painting, entitled *Les Prairies*, is 6 feet high and 32 feet wide. It was commissioned for the Winnipeg airport, and was completed in 1963. The original site for the painting was a curved wall in the Air Terminal building.

In the late 1970s, in preparation for renovations, the painting was removed from the wall and was rolled for storage. During the renovations, the curved wall was removed. The painting remained in storage for several years while officials tried to find it a new home.

After construction of the Montreal International Airport at Mirabel, Quebec was completed, administrators began looking for works of art to place on the walls of the terminal. The mural by the native Quebec painter was exactly what they had in mind. *Les Prairies* was shipped to Mirabel and was prepared for exhibit.

Finally, in 1980, Alfred Pellan's mural, considered a veritable masterwork in plastic metamorphosis based on the theme of the prairies,[1] once again became available to the general public. People of different cultures and walks of life now have the opportunity to see the mural, which is exhibited on a large white wall overlooking the main terminal area at the Montreal International Airport.

In 1991, the painting started to exhibit signs of deterioration, and members of the Canadian Conservation Institute were asked to examine it. The paint surface was slightly discoloured and the canvas was deformed. Most disturbing, however, was the flaking of paint that had occurred in specific areas throughout the painting.

Considering the obvious difficulties and risks associated with the transport and handling of such a large painting, the conservators decided to complete the treatment in-situ.

Fortunately, a vacant room in the airport was available for several months. Although this provided the conservators with a secure area for their equipment and for the painting, the width of the room was not great enough to allow the painting to lay flat. This presented the conservators with the problem of adapting the normal methodology of addressing large areas of fragile and unstable paint from a horizontal, supported painting to a vertical and unsupported canvas. Once this logistical obstacle was surmounted, the treatment progressed well. Surface cleaning, consolidation, restricted infusion of the paint layer, and inpainting were some of the treatment steps. The painting was also mounted onto a new stretcher.

During the treatment procedure, conservators also attempted to identify and document the artist's materials and techniques. CCI's Analytical Research Services Division supported this undertaking by performing analyses.

Although it has been a challenge to deal with the various space and equipment limitations, it has been a pleasure to conserve and study such an interesting and important painting.

The Alfred Pellan retrospective planned for 1994 at the Musée du Québec has generated new interest in the study of this artist's contributions to the art world. Through upcoming conservation and research projects for the retrospective, CCI hopes to provide more insight into the work of this prominent Canadian artist.

[1] Jean Bédard, *Culture vivante*, no. 26 (September 1972). ♦

Les Prairies *being taken down at Montreal International Airport before conservation treatment.*

The International Institute for Conservation of Historic and Artistic Works (IIC) will hold its 15th International Congress in Ottawa, 12-16 September 1994. The title of the Congress will be *Preventive Conservation: Practice, Theory and Research.*

A New Director for Conservation Research Services

by David Grattan

The Canadian Conservation Institute is happy to announce the appointment of J. Cliff McCawley as the new Director of Conservation Research Services. Cliff takes over this task from Dr. Kenneth Macleod, who held the position since 1976 and who retired in August 1992.

As Director of Conservation Research Services, Cliff carries the responsibility for CCI's three scientific sections, namely Conservation Processes Research, Analytical Research Services, and Environment and Deterioration Research.

Cliff brings with him a wealth of experience and knowledge. He began his career in industry, and spent eight years on a special scholarship in the Mond division of Imperial Chemical Industries (ICI) in Britain. During that time, Cliff received a chemistry degree from the University of Salford (where, he tells us, he occasionally attended lectures but spent more time playing rugby football).

Cliff worked in various ICI laboratories and plants, and eventually joined the staff of the research laboratory. After eight years with ICI, Cliff realised that he needed to work in a field more in accord with his true interests. Thus, in 1970, he joined the research laboratory of the National Museum of Antiquities in Edinburgh, Scotland where, amongst such other activities as thermoluminescence

J. Cliff McCawley

dating, Cliff studied the problems of waterlogged wood.

While at Edinburgh, Cliff continued his studies and, in 1974, received a Masters degree in archaeological chemistry from the University of Salford. He had intended to continue on to a Ph.D., but instead he accepted an appointment as Senior Conservation Scientist at the Conservation Division of Parks Canada in Ottawa, where he was responsible for the Analytical Laboratory. However, Cliff did not remain in that position for very long. CCI chauvinists may claim that he saw the light when, in 1976, he was lured to CCI to create a new section, namely, Conservation Processes Research. This section, the brainchild of CCI's then Director General Brian Arthur, was set up to study the scientific aspects of conservation procedures, and had a mandate to develop new and improved conservation techniques. At that time, there were only two people and absolutely no equipment in the section. Sixteen years later, there are eleven of us, and we have conducted and published research in many areas of conservation. During his period as Chief of CPR, Cliff achieved much.

In 1980, Cliff was seconded on a special appointment as Assistant Director Regional Services to set up CCI's very successful mobile laboratory service. He has served as chairman of IIC-CG, as both Chairman and Treasurer of the Directory Board of the ICOM Committee for Conservation, and as a member of ICOM's Advisory Council. He was also Coordinator of the Metals Working Group of the Committee for Conservation. As a Councillor for IIC, he sits on both the Directory Board of ICOM and the IIC Council. Therefore, Cliff is probably the only person who has been involved with ICI, CCI, IIC, IIC-CG, and ICOM-CC. Not only that, he can still tell you which is which.

We congratulate Cliff on his new appointment, and wish him continuing success in advancing conservation research. ♦

Ancient Andean Textiles Brought to Life

by the Staff of CCI's Textiles Section

From May 25 to 28, 1992, CCI's Textiles Section hosted a workshop on ancient Andean textiles. The workshop was designed for those professionally involved in the care of ancient Peruvian textiles, and was taught by Mary Frame, a well-known specialist in this field. Due to the course's intensive nature, enrolment was restricted to 15 participants. In addition to staff and interns from CCI's Textiles and Archaeology Sections, textile conservators attended from across Canada, representing conservation labs and institutions that house ancient Peruvian textiles.

The purpose of this workshop was to provide textile conservators with more first-hand knowledge of ancient Peruvian textiles. By gaining a fuller understanding of how these textiles were made and used, conservators will be better able to make decisions regarding the suitability of conservation treatments for them and the conditions and techniques that should be used for their display and storage.

Through slide lectures, demonstrations, and hands-on sessions, participants were introduced to a wide variety of techniques for making yarn and fabric. These included spinning using sticks and drop spindles, cord twisting and knotting Quipus, making a continuous warp without tying knots at each colour change, weaving headbands, cross knit looping (needleknitting), sprang, sling braiding, and larkshead knotting as used in Andean four-cornered hats. In addition to learning the basics of these techniques,

Mary Frame leading the Ancient Andean Textiles Workshop at CCI.

participants were shown how some patterns in ancient Peruvian textiles reflect (or are derived from) the structure of the fabric itself.

Course materials included copies of pertinent articles and numerous wonderfully clear diagrams of the various techniques, drawn by Mary Frame. In addition, participants had the opportunity to share their experiences working with this type of collection.

A selection of ancient Peruvian textiles on loan from the collection of the Canadian Museum of Civilization's Archaeological Survey of Canada, and several ancient Peruvian textiles from the Department of Anthropology, University of Montreal that were being treated in CCI's Textile Section, provided examples of many of the techniques discussed, and were a very valuable addition to the workshop.

In a session devoted to conservation concerns, Mary Frame presented the researcher's point of view and the critical role that construction details can play. She also emphasized the need for the entire textile, front and back, to be accessible for study. If only a short length of a rolled textile or only the front face of a flat textile is exposed, the researcher may be prevented from seeing if any anomaly in pattern or structure is present.

Another concern was the possibility that the three-dimensional texture created by overtwisted yarns could be altered by an aqueous treatment. With the aid of slides, Ms. Frame described methods for mounting and storing the ancient Peruvian textiles that she had encountered in the collections of various institutions. Examples of archaeological textile mounts used in CCI's Archaeology and Textiles Sections were also examined and discussed.

Ms. Frame's knowledge and obvious love of ancient Peruvian textiles, combined with her organized and relaxed teaching manner, made the workshop a thoroughly enjoyable experience. Having attempted to recreate some of the techniques used in these exquisite textiles, one can only marvel all the more at the skill of their original makers. ♦

Meeting the World at ICOM 92

by Bob Barclay and Deborah Robichaud

Conferences generally provide a unique opportunity to meet with colleagues from all walks of museum life. The XVIth General Conference of the International Council of Museums (ICOM), held in Quebec City on September 19 to 26, 1992, was no exception.

The theme of ICOM 92, *Museums: Rethinking the Boundaries*, set out to foster a much closer interdisciplinary liason than seen in previous conferences. Although links between committees have been an on-going feature of ICOM almost since its inception, there was definitely a heightened air of cooperation at this meeting. This interaction of museum professionals from the widest possible range of disciplines might well be regarded as a unique contribution to the formation of networks between otherwise disparate bodies.

While many of the papers given at the various international committee sessions focused on the boundaries within the museum profession, the boundaries within ICOM itself were also explored. Indeed, the interconnectedness of ICOM was made manifest in a way that may have a lasting effect on how the Council regards itself and on how it is regarded from outside. ICOM 92 was a salutary experience in this regard, credit for which goes to the foresight of the organizers. Future conferences will inevitably be modelled upon this one, if not thematically then certainly structurally.

Members of the Canadian Conservation Institute attended meetings of the committees and affiliated groups of ICOM, including the Committee for Conservation (ICOM-CC), the Musical Instruments Specialty Committee (CIMCIM), the Textile Working Group, Training of Personnel (ICTOP), Documentation (CIDOC), International Movement for a New Museology (MINOM), and Museology (ICOFOM).

CCI staff also participated in the five-day trade fair held in conjunction with ICOM 92. CCI staff demonstrated the highly popular laser scanning research project in collaboration with the National Research Council Canada, and conservators and conservation scientists were available to discuss conservation topics ranging from the Parylene process to textile conservation.

The Communications Canada booth at the trade fair featured CCI, the Canadian Heritage Information Network, Heritage Services, Exhibit Transportation Services, the Movable Cultural Property Program, the Canadian Cultural Property Export Review Board, Heritage Policy and Research, and Archaeological Resource Management.

At ICOM 92, the international museum community and the general public were able to sample the variety of heritage services offered by Communications Canada. Canadian museum and conservation workers had the opportunity to gather with their international colleagues to share ideas. ICOM 92 truly was a satisfying way to meet the world! ♦

Treatments for Waterlogged Wood-Metal Composites

by Lyndsie Selwyn

Conservators are faced with a challenge when they treat objects made from more than one material. This is especially true if the object cannot be taken apart. Treating both materials at the same time can be a problem, since standard treatments for one material may be harmful to another. For example, waterlogged wood is often treated by impregnating it with polyethylene glycol (PEG), then freeze-drying it to remove water. But PEG solutions are mildly acidic and corrode many metals. Similarly, removing harmful chloride ions from iron usually involves alkaline solutions which, if used on wood, cause degradation because such solutions could affect degraded cellulose in wood.

In 1983, David Grattan considered possible treatments for waterlogged composite objects containing wood and metal.[1] Clifford Cook, Anne Dietrich, and others tested over sixty aqueous treatments for wood-metal composites, studying wood associated with brass, bronze, copper, lead, and mild steel.[1,2] They looked for treatment solutions that would both consolidate waterlogged wood and slow or stop corrosion on the associated metal. They considered solutions containing PEG and a water-soluble corrosion inhibitor, or solutions containing a resin similar in structure to PEG that also contained corrosion-inhibiting functional groups. (A corrosion inhibitor is a substance which, when added in small amounts to the corrosive environment of a metal, appreciably decreases the corrosion rate.) Their search focused on amines because James Argo[3] had shown that aqueous organic amines could stabilize archaeological iron, and because many amine-containing aliphatics, polyethylene glycols, and polypropylene glycols were commercially available.

Potential treatments were prepared and tested in 1983 and 1984. Testing involved soaking wood-metal test pieces in the treatment solutions for about one month, and then freeze-drying them. Examples of these wood-metal test pieces are shown in the photo below. Following this simple test, the resins were evaluated, the results were summarized,[1,2] and the test samples were then stored in open containers inside a metal cabinet. In August of 1990, six years after treatment, Nancy Binnie re-evaluated these test samples and identified thirteen resins that could be considered successful at minimizing corrosion on one or more of the test metals.[4]

Recently, further work has been completed on a detailed study of how four of the solutions initially recommended by Clifford Cook *et al.*[1] affect the corrosion rates of clean metal surfaces: Hostacor KS1 in PEG 400 for iron, Pluracol 824 for iron, Witcamine RAD 1100 for copper alloys, and Acrysol G-110 for lead. Using weight-loss measurements, the corrosion rates of iron (cast iron and mild steel), copper alloys (bronze, rolled brasses, and cast brass), and lead have been determined in the recommended solutions using distilled water or synthetic seawater. Preliminary results for the corrosion rate of iron were presented by Mark Gilberg *et al.*,[5] and the final results will be published shortly.[6]

Following the initial recommendations, several wood and iron objects have been successfully treated in the Archaeology Section at CCI using either Hostacor KS1 in PEG 400 or Pluracol 824.

Wood-metal test pieces treated for one month in Hostacor KS1 in PEG 400 and then freeze-dried. The metals include (from left to right) a bronze disc, a brass rod, a lead strip, an iron nail, and a copper strip.

References

1. Cook, C., A. Dietrich, D. Grattan and N. Adair, "Experiments with Aqueous Treatments for Waterlogged Wood-Metal Objects," in *Waterlogged Wood*, Centre d'Etude et de Traitement des Bois Gorgés d'Eau, Grenoble, France (1984), pp. 147-159.

2. Cook, C., "Test of Resins for the Treatment of Composite Objects," *ICOM Committee for Conservation, Wet Organic Archaeological Materials Working Group Newsletter*, no. 14 (1986), pp. 3-5.

3. Argo, J., "The Treatment of Corrosion with Amines," *Conservation News*, vol. 7 (1982), pp. 7-9.

4. Binnie, N.E., "Corrosion-Inhibiting Resins for Waterlogged Wood/Metal Composites: Evaluation of Samples Six Years after Treatment," *ICOM Committee for Conservation, Metal Working Group Newsletter*, no. 6 (May 1991), pp. 4-8.

5. Gilberg, M., D. Grattan and D. Rennie, "Treatment of Iron/Wood Composite Materials," in *Conservation of Wet Wood and Metal*, ed. I.D. MacLeod, Western Australian Museum, Perth, Australia (1989), pp. 265-268.

6. Selwyn, L.S., D.A. Rennie-Bisaillion and N.E. Binnie, "Metal Corrosion Rates in Aqueous Treatments for Waterlogged Wood-Metal Composites," *Studies in Conservation*, in press. ♦

A Warning: All That Glitters Is Not Trade Silver

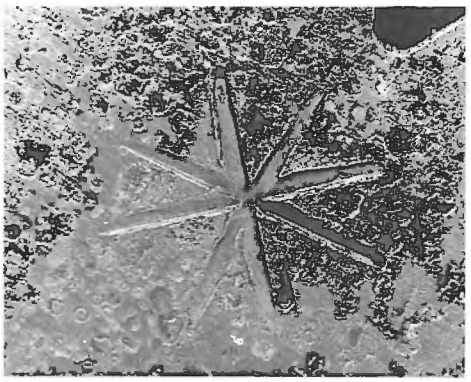
by John M. Taylor

During the 18th to mid-19th centuries, trade silver — small silver trinkets and ornaments — was used by trading companies in North America, such as the North West Company and Hudson's Bay Company, and by the French, British, and American governments of the day to trade with the Amerindians for goods and services. The objects ranged in size from small brooches and pins to larger pieces such as wrist bands, gorgets, and crosses, and could be considered an early form of currency. They were made by New World silversmiths in Quebec, Ontario, the Maritimes, and the USA, particularly during the period between 1750 and 1850.[1]

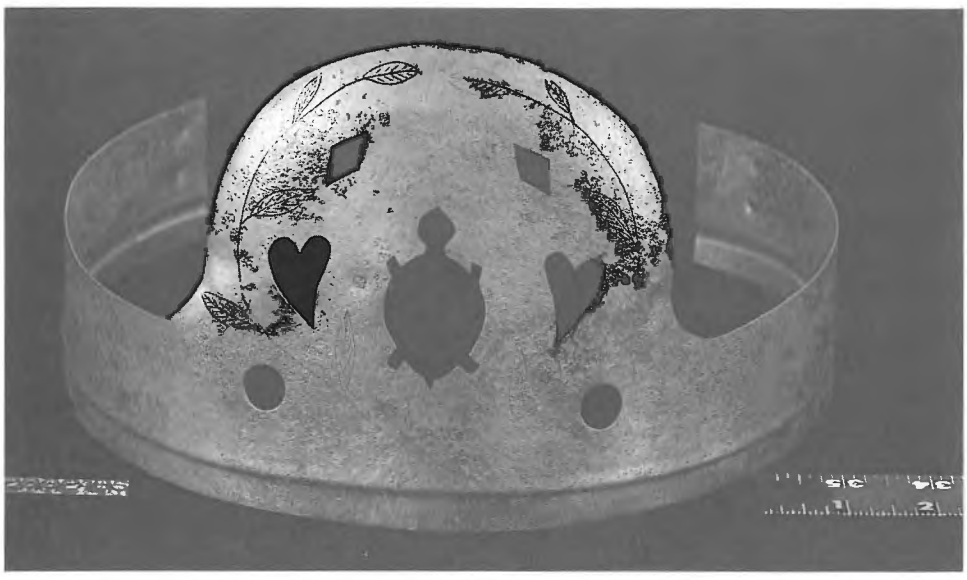
As many curators of ethnographic and archaeological collections in Canada are aware, a number of trade silver collections have been offered to museums and private collectors during the past 15 years. These collections have ranged in size from a few pieces to several hundred items. The documentation that accompanied these collections indicated that they were archaeological in origin, and that the trade silver had been excavated and collected by amateur archaeologists. Since little trade silver had been excavated by (or reported to) the professional archaeological and museum communities in the areas that these pieces were reported to have been found, several museums raised concerns as to their provenance. In response, a number of the collections were brought to CCI for examination.

To facilitate the study, arrangements were made to borrow some well-documented reference trade silver collections from museums in Canada and the United States. Detailed scientific analyses and examinations of the reference collections enabled CCI to develop a substantial data base of compositional, physical, and punchmark information; these features are characteristic and diagnostic of authentic North American trade silver from the period 1750 to 1850. When the comparative examinations were performed on the "suspect collections," the results differed markedly from the reference data in terms of composition, punchmark details, and surface features. In essence, the majority of pieces in the "suspect collections" were found to have been fabricated from modern silver that had been doctored with chemical and heat treatments in an attempt to make them appear old and/or archaeological in origin.

Due to the fact that the reference information could be used to fabricate fraudulent trade silver that is compositionally similar to authentic collections, CCI has not published the reference data. However, since the Institute has recently received several inquiries on trade silver, we felt we should advise our museum colleagues of the potential problem.



Detail of a silver gorget. The surface features are characteristic of chemical and heat treatments and not of archaeological silver. There are no signs of etching in the grooves of the incised figure - the tool marks are visible.



Silver headband with the punchmark SC, from one of the "suspect collections".

1. Barbeau, M., "Indian Trade Silver," *Proceedings and Transactions of the Royal Society of Canada*, Third Series, Vol. XXXIV (May 1940), pp. 27-41. ♦

Starting in 1993, CCI will be publishing a *Bibliography of Articles and Papers by CCI Staff*. The *Bibliography* will be an annual list of all articles, papers, etc. that have been written by members of CCI staff and that have been published in outside sources such as journals and books. A new *Bibliography* will be issued each year listing the articles published during the previous year.

The first *Bibliography of Articles and Papers by CCI Staff* will be printed early in 1993, and will list articles published in 1992.

To request a copy of the *Bibliography of Articles and Papers by CCI Staff*, please write to Extension Services, Canadian Conservation Institute.

Internships and Fellowships

In response to the diverse training requirements of the conservation community in Canada and abroad, the Canadian Conservation Institute offers Internship and Fellowship programs.

Internships are classified according to need, and comprise four distinct categories: curriculum internships, specialized technique internships, professional development internships, and conservation research internships.

The Fellowship program encompasses work in designated laboratories at CCI, as well as participation in CCI services to museums, galleries, and related institutions and associations throughout Canada (e.g., workshops, surveys).

The following individuals have recently participated or are currently involved in one of these programs at CCI.

Anne-Laurence Dupont completed three years of study for the Maîtrise de Sciences et Techniques of conservation of cultural works at the Université du Paris I-Sorbonne, specializing in graphic documents. Anne-Laurence is working on a project to evaluate commercial mass-deacidification processes. Conservation research internship. November 2 to December 31, 1992, and May 31 to October 29, 1993. (Conservation Processes Research Division)

Anne Harmssen is a restorer for paintings at the Herzog Anton Ulrich Museum in Braunschweig, Germany. Anne's internship focuses on the conservation treatment of paintings from the nineteenth and twentieth centuries. Professional development internship. January 4 to June 30, 1993. (Fine Arts Section)

CCI Services: Seminars, Lectures, Workshops, and Visits

To respond to specific needs within the museum community, CCI, in cooperation with provincial museum and art gallery associations, offers workshops, seminars, and lectures related to the conservation and care of museum and art gallery collections. CCI staff also participate in and present lectures to meetings of professional groups and associations.

August 1992

Tara Grant assisted at a field school held by Arctic College, at Peterhead Inlet, Iqualuit, N.W.T., a Thule site. Doug Stenton from Arctic College directed the excavation.

David Tremain, Robyn Douglas, Tom Stone, Deborah Stewart, Gordon Fairbairn, Fiona Graham, and **Anik Morrow** were members of the recovery team from CCI that responded after a fire at the Billings Estate Museum, Ottawa. They spent several days on site stabilizing artifacts, and brought some objects to CCI for treatment. (See the article on CCI's emergency services in this newsletter.)

Judy Logan visited Memorial University's excavation at Ferryland, Newfoundland, the site of a colony established in 1621 by George Calvert, Lord Baltimore. James A. Tuck is directing the excavation.

John Taylor presented a talk on Rock Art Conservation at Bon Echo Provincial Park, Cloyne, Ontario.

Malcolm Bilz presented "Polymer Degradation in Conservation" at the American Chemical Society Conference, Polymers in Museums Sub-section, in Washington, D.C.

Janet Mason, Sherry Guild, and **Peter Vogel** completed a survey of the collection at the Basilian Fathers Museum in Mundare, Alberta. A follow-up report providing recommendations for the future care and conservation of this collection is being prepared.

Helen McKay and **Anik Morrow** completed the in-situ treatment of a large painting by Alfred Pellan, at the Montreal International Airport, Mirabel, Quebec. (See the article on *Les Prairies* in this newsletter.)

Bob Barclay took part in meetings in Rome, Italy relating to future directions for ICCROM's PREMA course for sub-saharan African museums.

Tom Stone, Gordon Fairbairn, and **Judy Logan** visited Fulford House in Brockville, Ontario to inspect damage to a silver vault made of metal and wood.

September 1992

Several CCI staff members attended the ICOM 92 conference in Quebec City, Quebec, and many also helped to staff the CCI/DOC display booth at the trade fair that was held concurrently. **David Tremain** presented information on paper leaf-casting techniques at the display booth. **Réjean Baribeau** and **John Taylor,** together with Marc Rioux, Luc Cournoyer, and Guy Godin of the National Research Council Canada (NRC), presented a demonstration of NRC's 3-D laser scanner system for recording works of art.

J. Cliff McCawley chaired the meetings of the ICOM Committee for Conservation (ICOM-CC) at the ICOM 92 conference in Quebec City. **Bob Barclay** organized and participated in the meetings of the ICOM Working Group for Musical Instruments (CIMCIM) in Quebec City, held in conjunction with the ICOM 92 conference. **Ela Keyserlingk** took part in the ICOM 92 conference in her capacity as Assistant Coordinator of the ICOM Committee for Conservation's Textile Working Group.

Ian Wainwright, Jeremy Powell, Tom Stone, and **Fiona Graham** were members of a team that removed graffiti from the Mazinaw Lake rock art site in Bon Echo Provincial Park, Cloyne, Ontario.

Janet Mason responded to an emergency mould problem at the Canadian Canoe Museum in Peterborough, Ontario. Janet spent one day removing mould from several kayaks in the museum's storage area.

David Tremain attended meetings at the Bibliothèque centrale in Montreal, Quebec to discuss the conservation treatment options for the *Album Viger*, a bound volume of various works on paper that depict the history of the City of Montreal.

Sherry Guild visited Gayle McIntyre, instructor in the Art Conservation Techniques Programme at Sir Sanford Fleming College in Peterborough, Ontario, to provide instruction on and demonstrate the use of the Paper Suction Table. Sherry also visited the Hastings County Museum in Belleville, Ontario to examine several pastel portraits and to advise the museum on the feasibility of treating these works of art.

Paul Marcon participated in a seminar on "Art in Transit: Packing and Transportation of Paintings" in Boston, Massachusetts in September, and in Dallas, Texas in November.

Jean Tétreault presented a paper on the choice of materials for museum storage areas, "Display and Storage Materials," at the Minerology and Museums Conference II held in Toronto, Ontario. Jean also presented a joint paper with Rob Waller of the Canadian Museum of Nature on "A Survey of Pollutant Concentrations in Mineral Collections."

A.P. Joe Dorning and **Deborah Robichaud** attended the Canadian Museums Association and the Société des musées québécois conferences in Quebec City, Quebec. Joe also attended the British Columbia Museums Association Annual Conference in Burnaby, British Columbia.

Marie-Claude Corbeil, David Miller, and **Elizabeth Moffatt** visited the Centre de conservation du Québec and the Musée du Québec, Quebec City, Quebec to sample the paintings by Alfred Pellan in these collections for the Canadian Artist's Materials Painting Project.

John Taylor attended the 14th Congress of the International Institute for Conservation of Historic and Artistic Works (IIC) in Madrid, Spain on the "Conservation of the Iberian and Latin American Cultural Heritage." John acted as Chairman of a technical session on leather conservation.

Stan Frydryn did a survey of the ceramic collection at the University of British Columbia Museum, Vancouver, B.C. in September, and of the ceramic collection at the McCord Museum of Canadian History in Montreal, Quebec in October.

Gordon Fairbairn and **Nora Nagy** gave a five-day Furniture Conservation Workshop at Sir Sanford Fleming College, Peterborough, Ontario. **Laura Nagora** was on hand to give a one-day session on guilding.

Seminars

"Care of Machinery Collections"
Carl Schlichting at the Western Development Museum,
Moose Jaw, Saskatchewan.

"Guidelines for Selecting Materials for Use in the Display, Storage, and Transportation of Museum Objects"
Jean Tétreault at the Prince of Wales Northern Heritage Centre,
Yellowknife, N.W.T.

October 1992

Diana Komejan, conservator for the Yukon Heritage Branch, Yukon, began one month of specialized conservation training in the Ethnology Laboratory.

Tom Stone represented CCI at the Ontario Museums Association Conference in Brockville, Ontario. Tom also attended the Association of Manitoba Museums Conference in Winnipeg, Manitoba, where he took part in the pre-conference workshop on organic materials and participated in a panel discussion relating to the conservation of Native artifacts.

Deborah Stewart attended the conference "Prevention, Response, Recovery" at the Massachusetts Institute of Technology in Cambridge, Massachusetts.

Ela Keyserlingk and **Jan Vuori** examined the Gondar Curtain at the Royal Ontario Museum, Toronto, Ontario.

Bob Barclay and Phil White (of the Canadian War Museum) gave a presentation on Care of Collections to the Bytown Militia Collections Association, Ottawa.

Charles Gruchy, John Taylor, and **Réjean Baribeau** attended the Resoration '92 Conference in Amsterdam, Holland, where Réjean presented the paper "Recent Advances in the Use of the Laser Scanner in the Examination of Paintings." Following the meeting, John and Réjean visited Munich, Germany to discuss the scanner and the electronic imaging system that the Doerner Institute developed in the European Community's Vasari Project.

Tom Stone attended a one-day meeting of the Advisory Committee for the Art Conservation Techniques Programme at Sir Sandford Fleming College in Peterborough, Ontario.

Marie-Claude Corbeil attended the 3rd International Conference on Non-Destructive Testing, Microanalytical Methods, and Environment Evaluation for the Study and Conservation of Works of Art, in Viterbo, Italy.

Deborah Robichaud attended the Museum Association of Newfoundland and Labrador Annual Conference in St. Anthony, Newfoundland.

Réjean Baribeau visited Télécom Paris to discuss laser scanner and imaging technology.

A.P. Joe Dorning attended the Alberta Museums Association Annual Conference in Medecine Hat, Alberta.

Helen Burgess presented "Recent Research on the Effect of Aqueous Alkaline Treatments on Paper" to the staff and students of the Art Conservation Program at Buffalo State College, Buffalo, New York.

The following CCI staff members participated in the Association des Restaurateurs d'Art et d'Archéologie de Formation Universitaire (ARAAFU) Conference held in Paris, France: **Jean Tétreault** gave a presentation on suitable materials for storage and display entitled "Matériaux de construction, matériaux de destruction"; **Paul Marcon** presented "The Packing and Transport of Cultural Property"; **Carole Dignard** presented a paper on mounting techniques for storage and display; and **David Tremain** presented a paper on "Protecting Cultural Collections from Disasters: An Overview."

Debra Daly Hartin and **Jim Bourdeau** visited the Musée d'art de Joliette in Joliette, Quebec to consult with curators on several conservation matters.

Peter Vogel attended Restako 92, the 22nd Annual Meeting and Conference of the Association of Professional Conservators in Germany, in Ulm, Germany.

Anik Morrow examined several paintings at the National Arts Centre, Ottawa, and prepared a follow-up report summarizing the conservation needs of these paintings.

Seminars

"Care of Furniture and Wooden Objects"
Gordon Fairbairn and Marsha Selick at the Heritage House Museum,
Smiths Falls, Ontario.

"Care, Cleaning, and Basic Repair of Ceramic and Glass Objects"
Judy Logan and Stan Frydryn at the O'Dell Inn,
Annapolis Royal, N.S.

November 1992

Judy Logan and **Lyndsie Selwyn** did a survey of several pieces of aluminum and bronze sculptures at the National Arts Centre, Ottawa. **David Hanington** also visited the National Arts Centre to examine a framed photograph and a memorial book. David sent a follow-up letter to the client summarizing the conservation needs of these two items.

Jim Bourdeau visited the Dominican Monastery of Les Frères Prêcheurs in Ottawa to examine the painting *Self Portrait*, by Jean Dellaire, and to advise on its conservation needs. The painting is being loaned on a long-term basis to Arts Court Gallery, Ottawa, and will be included in a travelling exhibition.

Stefan Michalski made a site visit and met with an architect to discuss upgrading the HVAC systems in historic buildings at the St. Boniface Museum, Winnipeg, Manitoba.

Marie-Claude Corbeil gave a seminar on the Analysis of Works of Art and of Archeological Objects to students of the museology programme at the Université Laval, Quebec City, Quebec.

Ela Keyserlingk presented a paper on the reversibility of textile treatments at the Harper's Ferry Regional Textile Group Conference in Washington, D.C.

Tom Stone participated as an instructor in the "Artifacts" course for the Ontario Museums Association in Woodstock, Ontario.

Ian Wainwright and **Stefan Michalski** visited Petroglyph Provincial Park, Ontario to advise on environmental conditions within the protective structure over the site.

Seminars

"Care of Machinery Collections"
Carl Schlichting at the Hamilton Museum of Steam and Technology,
Hamilton, Ontario

Specialized Conservation Workshops (combined)
"Rates of Light and UV Damage"
and "RH Fluctuations and Wooden Artifacts"
Stefan Michalski at the Provincial Museum of Alberta,
Edmonton, Alberta

"The Permanence of Artists' Materials and Techniques"
Leslie Carlyle and Wanda McWilliams at the Confederation Centre Art Gallery and Museum,
Charlottetown, P.E.I.

December 1992

Paul Marcon and **Charles Costain** carried out a building survey on storage areas at the Royal British Columbia Museum, Victoria, B.C. Paul and Charlie helped to organize and participated in a seminar associated with the IIC-CG on "Art in Transit: Packing and Transportation of Paintings," which was held in Vancouver, B.C. in December 1992, and in Los Angeles, California in January 1993.

Dr. Leslie Carlyle met with staff of the Tate Gallery in London, England to discuss current issues in conservation research, and to finalize an essay she wrote with Anna Southall of the Tate Gallery that is to be published in the "Vernon Gift" exhibition catalogue in 1993.

January 1993

Jane Down and **Ela Keyserlingk** participated in a meeting on the use of adhesives and consolidants in textile conservation at the Cooper-Hewitt Museum in New York City, New York. Ela presented a paper on the use of Acryloid P550-40TB, and Jane spoke about her research into poly(vinyl) acetate and acrylic adhesives and their uses in textile conservation.

Judy Logan gave a series of lectures for the faculty and students of the Department of Archaeology, Simon Fraser University, Burnaby, B.C. Judy also presented a paper on archaeological conservation at the meeting of the Ottawa Chapter of the American Insitute of Archaeology.

John Taylor presented lectures on "Attribution and Authenticity: The Role of Science in Art and Archaeology" to the Capital Crime Writers Association and to the Friends of Art History at Carleton University, Ottawa.

Sherry Guild, of CCI's Works on Paper Section, began a six-month secondment to the Paper Conservation Department of the National Gallery of Canada, Ottawa.

David Hanington and **Robyn Douglas** presented a workshop on "Protective Folders and Box Making" to students of the Art Conservation Techniques Programme at Sir Sandford Fleming College, Peterborough, Ontario.

Seminars

"A Framework for Preventive Conservation"
Paul Marcon and Jean Tétreault at the MacBride Museum, Whitehorse, Yukon
and for the Museums Association of Saskatchewan, Saskatoon, Saskatchewan

"Storage and Display of Textiles"
Esther Méthé and Joan Marshall at the Moncton Museum, Moncton, N.B. ♦

Saving the Twentieth Century: The Conservation of Modern Materials

CCI is proud to announce the publication of Saving the Twentieth Century: The Conservation of Modern Materials. This new publication contains the proceedings of the conference "Symposium 91" which was held in Ottawa in September 1991.

This book gives an overview of current knowledge regarding modern materials in the museum context. In 39 papers, authors from North America, Australia, and Europe discuss approaches to the conservation of synthetic organic materials, textiles, metals, and archival conservation.

The papers are grouped according to the following subjects:
- Modern Materials in Collections
- Conservation Policies and Plans
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- Processes of Deterioration
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