



A New National Service

2004-2005 Annual Report



Canadian Museum of
NATURE
Canada

Mandate

To increase, throughout Canada and internationally, interest in, knowledge of and appreciation and respect for the natural world by establishing, maintaining and developing for research and posterity, a collection of natural history objects, with special but not exclusive reference to Canada, and by demonstrating the natural world, the knowledge derived from it and the understanding it represents.

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Photo: Martin Lipman

Report from the President and Chief Executive Officer

I am pleased to present the Annual Report of the Canadian Museum of Nature for the period April 1, 2004 to March 31, 2005. Entitled “A New National Service”, the report highlights our progress against the seven objectives for 2004-05, as we work to ensure that the Museum is of benefit and value to the largest number of Canadians.

Renewing a heritage treasure

The renewal of the historic Victoria Memorial Museum Building was a major focus this fiscal year. This comprehensive renovation of the Museum’s public exhibitions site is now well underway. We intend to open the fully renovated West Wing in the Fall of 2006, offering an exciting public preview of the features of the new space. We are on track to complete the Renewal Project in 2009-10.

Fundraising activities continued through the *Natural Partnerships* Campaign with emphasis on the key national public education projects – the *Fossil* Project and the *Nature of Humans* Project. The current campaign seeks to generate \$10M and approximately \$4.5M has been pledged to date. A second campaign of \$6M will be launched to stimulate investments in the *Discovery Centre* Project and the *Water* Project.

Creating partnerships nationally and internationally

Partnerships and co-ventures were actively pursued with other like-minded organizations. As a step toward fulfilling its vision of national service, the Museum has worked with colleagues across Canada to create a national network of natural history museums. The Alliance of Natural History Museums of Canada (ANHMC) was incorporated in February 2004. This year, the new national network worked to develop exchanges of travelling exhibitions across the country and internationally, plans to further research and collections development, and a joint communications strategy.

The Museum combined forces with the Montreal Science Centre, and with fellow ANHMC members the Yukon Beringia Interpretive Centre and Royal Tyrrell Museum of Palaeontology, to develop the *Ice Age Mammals* Project. The project includes a travelling exhibition and programming, and is scheduled to open at the Museum’s Victoria Memorial Museum Building in June 2005 and at the Montreal Science Centre in May 2006.

The Museum successfully negotiated terms for the North American Tour of *Fatal Attraction*, an exhibition on animal courtship, co-produced by three members of CASTEx, a European natural history and science museum network. It will be presented in North America by the Alliance of Natural History Museums of Canada and managed by the Canadian Museum of Nature.

A Capital Museums Passport – a collaborative tourism initiative in Ottawa – was spear-headed and launched by the Canadian Museum of Nature and the Canada Science and Technology Museum Corporation in May 2004 to encourage visitors to the nation’s capital to take full advantage of the wealth of arts, cultural and historical institutions in the region. The initiative was also supported by the National Capital Commission.

Connecting Canadians with their environment

The Museum enhanced national access to its scientific expertise and educational programmes by working with partners across Canada and focusing its activities on understanding environmental change through time. The travelling exhibition *Sila: Clue in to Climate Change* was produced in partnership with the Centre for Traditional Knowledge, with five exhibitions launched simultaneously across Canada on Earth Day in April 2004, in conjunction with the National Film Board’s five-part high-definition documentary series on climate change: *Arctic Mission*.

Parks Canada and the Museum developed a project to digitize biological collections of significance to the national parks system. This will enable the assessment and monitoring of the ecological integrity of a number of Canada's most important natural environments. Ultimately, the data will contribute to fulfillment of Canada's obligations under the United Nations Convention on the Conservation of Biological Diversity.

The Museum's Canadian Centre for Biodiversity is leading a large stewardship initiative on native plant biodiversity, with financial assistance from the Salamander Foundation. As part of this initiative to preserve Canada's natural heritage, a new Web site, *Native Plant Crossroads*, was launched in Spring 2005 on **nature.ca** to enrich public understanding of native plants and what people can do to foster and conserve them.

The Museum upgraded scientific equipment in support of this research including light and electron microscopy, x-ray analysis of minerals, DNA sequencing and a computer facility for digital mapping, data-basing and imaging. The operation of the 3D Centre enabled the Museum to keep pace with rapidly growing demands for the precision afforded by digital imagery.

Providing on-line access to information resources

Increased access to electronic data permitted greater use of the natural history collections and related information for research into environmental and public health issues and for public education. Priority collections for upgrading and data input were identified. A total of 14,467 new accessible electronic collection records were created, exceeding this year's goal by over 100 percent.

In 2004-05, there were 4.7 million visits to the Museum's Web site **nature.ca**, an increase of 34 percent over the previous year. There were more than 29.9 million page views, up 45 percent from last year.

The *Sila: Clue in to Climate Change* Web site was launched in November with 100 bilingual pages. In March 2005, *Ukaliq: the Arctic Hare* was launched on **nature.ca**, enabling people to explore the fascinating world of one of Canada's least known Arctic mammals. The initiative, which makes available original unpublished research, was made possible with the support of the Canadian Heritage Information Network through the Virtual Museum of Canada programme.

Improving management efficiencies

The human resources and financial management information systems were updated, and reductions in facilities operations expenditures were implemented. The recent Treasury Board Secretariat benchmark review of real property costs noted that the Canadian Museum of Nature had the lowest cost-per-square-metre for facilities and security operations among similar museums.

More steps forward

Thanks to the commitment and continuing guidance of the Board of Trustees, to the dedication and good work of the Staff, and to the increasing involvement of donors, partners and the Canadian public, the Canadian Museum of Nature continues to make progress in developing new ways to serve and to benefit growing numbers of Canadians.



Joanne DiCosimo
President and Chief Executive Officer

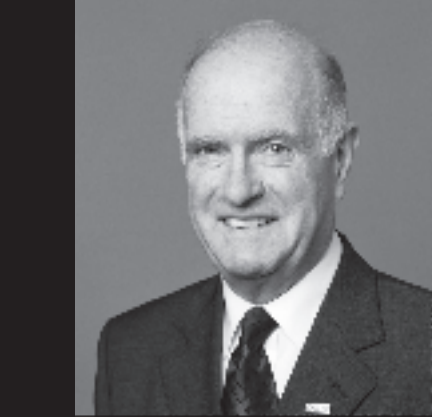


Photo: Lawrence Cook

Message from the Chair

It was with great pleasure that I accepted the position of Chair of the Board of Trustees for the Canadian Museum of Nature in March 2005. Having served 10 stimulating years as a member of the Board, I was an active participant in developing the new vision and model of national service for the Museum.

In my role as Chair, a key priority will be to preserve and guide these new directions over the coming years. The Museum plays such an important public education and research role in describing and documenting the impact of environmental change on nature. The unique way in which it exercises its national service role through collaboration and partnerships – especially the Alliance of Natural History Museums of Canada – means that Canadians across the entire country will be able to contribute to and collectively learn about pressing issues that affect our daily lives.

Another priority will be the successful and well-managed completion of the renewal of the Victoria Memorial Museum Building and the magnificent new natural history exhibits it will house – a major focus for us all. It is exciting to see the plans become reality as the five-year renovation, which began in April 2004, moves forward. The Museum's 30-year-old dinosaur hall, a very popular gallery, closed in January 2005 as part of the renovation project. Entitled *Life through the Ages*, the dinosaur hall has been home to a dozen dinosaurs, including *Edmontosaurus*, the first dinosaur ever mounted for public view in Canada in 1913. The new *Fossil Gallery* will open in Fall 2006. A new signature gallery that will anchor the renovated West Wing, the *Fossil Gallery* is part of a major national public education project that will explore the conditions surrounding the extinction of dinosaurs and the emergence of mammals.

Change is also affecting many of the other prestigious exhibits as the West Wing is renovated. The dazzling collection of rare gems and minerals that made up the Viola MacMillan Gallery have been packed away, in safe-keeping for exhibition in a future gallery. A special event was held in September 2004 to celebrate the work of artist Clarence Tillenius, who created eight of the dioramas in the Museum's Mammals Hall. At special screenings of *Tillenius: The Art of Nature*, people had the opportunity to meet the 91-year-old artist. The works he created for the Museum are considered national treasures, and are being carefully dismantled and relocated in preparation for the Fall 2006 opening of a renovated West Wing.

A final key priority as Chair will be to oversee a substantial rebuilding of the Board of Trustees, as seven out of eleven board members are nearing the end of their terms. I wish to express a special note of appreciation to my colleague Louise Beaubien Lepage, who accepted the role of Acting Chair in March of 2004 when illness forced Frederic Kasravi to resign. Sadly, Dr. Kasravi passed away last July. On behalf of the Board and Staff, I wish to acknowledge his contribution to the Museum. His tenure as Chair was brief, but his enthusiasm for the Museum and its role in promoting an appreciation of the natural world was boundless.

I also wish to thank retiring Board members Patricia Stanley Beck, Carol McDonald and Garry Parenteau for their contributions, and to welcome new Board members Mary Hofstetter, Teresa MacNeil and Anne Wallace. I look forward to continuing to work with all of the members of the Board of Trustees and the Staff to implement the strategic direction and usher in a new era of connecting Canadians with nature.

R. Kenneth Armstrong, O.M.C.

Chair of the Board of Trustees



Photo: Martin Lipman

Message from the Acting Chair

For approximately one year, it has been my privilege to serve as Acting Chair of the Board of Trustees at the Canadian Museum of Nature.

Without a doubt, these are challenging times for the Museum and it is a period of substantial renewal in many ways.

This past year, the Victoria Memorial Museum Building Renewal Project, a very important milestone for the Museum, was a top priority for the Board of Trustees and Staff. As well, the creation of a Nominating Committee to ensure succession plans for a renewed Board of Trustees was also a major focus due to the significant turnover of board members.

I would like to thank the Board for their commitment to the Canadian Museum of Nature and the Staff for their dedicated support throughout the year. Thank you for making my role as Chair and Board Member over the years a very rewarding and memorable experience.

A handwritten signature in cursive script, reading "Louise Beaubien Lepage".

Louise Beaubien Lepage

Acting Chair

March 2004 – February 2005



Photo: Martin Lipman

In Memoriam

Dr. Frederic T. Kasravi, LLD

Chair, March 2003 – March 2004

It is with sadness that we recognize the passing of our former Chair, Dr. Frederic Kasravi last July, due to illness. On behalf of the Board and Staff, we wish to acknowledge his contribution to the Museum. His tenure as Chair was brief, but his enthusiasm for the Museum and its role in promoting an appreciation of the natural world was boundless.

Performance Highlights

Photo: Martin Lipman



Renewing a national treasure

With final project approval and \$168.3 million allocated by the Government of Canada to fund the project, the Canadian Museum of Nature embarked on the extensive, five-year renovation of the historic Victoria Memorial Museum Building. The renovation will achieve key infrastructure upgrades and ensure that this venerable, heritage building will continue to be a dynamic museum experience for future generations of Canadians.



Photo: Lawrence Cook

Climate change collaboration

Sila: Clue in to Climate Change was produced in partnership with the Centre for Traditional Knowledge. The five exhibitions were launched simultaneously across Canada on Earth Day in April 2004, in conjunction with the National Film Board's five-part high-definition documentary series on climate change: *Arctic Mission*.

Alliance of Natural History Museums of Canada

Members of this national network worked to develop joint research, exhibitions and collections management strategies. An inventory of natural history collections was compiled and preliminary findings presented by the Collections Committee at a September meeting. The Communications Committee developed a communications strategy to encourage informed discussion with key stakeholders and decision makers on natural science and sustainability issues.



Photo: Special Event Digital Photo

The Gee! in Genome

This innovative exhibition on the science of genomics opened in Edmonton at the Royal Alberta Museum, in Toronto at the Ontario Science Centre and in Montreal at the Montreal Science Centre. To date, approximately half a million Canadians have participated in the national project. *The Gee! in Genome* was produced by the Canadian Museum of Nature and presented by Genome Canada, in partnership with the Canadian Institutes of Health Research.

A Museum model for risk assessment

The Museum continued to play an international leadership role in museum collection risk analysis. The American Museum of Natural History recently announced a comprehensive, multi-million dollar risk management strategy based on the Canadian Museum of Nature model. Staff offered Risk Assessment Workshops to the San Diego Natural History Museum, the Museum of New Zealand Te Papa Tongarewa and the Royal British Columbia Museum.



Photo: Courtesy of the Royal Belgian Institute of Natural Sciences

Fatal Attraction to Tour North America

The Museum successfully negotiated terms for the North American tour of *Fatal Attraction*, an exhibition on animal courtship co-produced by three members of CASTEx, a European natural history and science museum network. It will be presented in North America by the Alliance of Natural History Museums of Canada and managed by the Canadian Museum of Nature. This initiative will build awareness and increase capacity for both natural history networks.

Ice Age Traveller

The Canadian Museum of Nature joined forces with the Montreal Science Centre and fellow ANHMC members the Yukon Beringia Interpretive Centre and Royal Tyrrell Museum of Palaeontology to develop the *Ice Age Mammals* Project. The project includes a travelling exhibition and programming, and is scheduled to open in June 2005 and at the Montreal Science Centre in May 2006. The exhibition offers a rich selection of fossils (some on public display for the first time), suggests possibilities of what drove the large beasts of Beringia to extinction and raises questions about the impacts of climatic change.



Illustration: George "Rinaldino" Teichmann

Biodiversity Information networks

The Canadian Museum of Nature once again served as chair of the Federal Biodiversity Information Partnership (FBIP), a network of seven federal departments and agencies with natural science interests. Two proposals for data coordination projects were approved: pollinator species and mosquitoes. The FBIP Partnership Agreement was renewed for the next three years and work to secure the resources necessary to support this horizontal federal program continued throughout the year.

3D: From fossilized finds to religious relics

Staff at the Canadian Museum of Nature's Centre for 3D Imaging created precise, three-dimensional records of unique artifacts and specimens, ranging from dinosaur fossils and animal bones to religious objects. They scanned the skeleton bones of the Great Horned Owl for Canadian Geographic for use in a television documentary. On behalf of the Canadian Conservation Institute, the 3D Centre produced an exact digital copy of a fragile, 400-year-old Christian cross, excavated in Ferryland, Newfoundland.



Image: Alex Tirabasso / Paul Bloskie

Partnering with Parks Canada

Parks Canada and the Museum developed a project to digitize biological collections of significance to the national parks system. This will enable the assessment and monitoring of the ecological integrity of a number of Canada's most important natural environments. Ultimately, the data will contribute to fulfillment of Canada's obligation under the United Nations Convention on the Conservation of Biological Diversity.

Viewing a virtual Arctic Hare

Ukaliq: The Arctic Hare was successfully launched in March 2005, hosted on the Canadian Museum of Nature's Web site **nature.ca** as part of the Virtual Museum of Canada, with the support of the Canadian Heritage Information Network. The *Ukaliq* Web site explores this little-known Northern mammal from biological, scientific and cultural points of view. The site contains games, activities, hundreds of photographs, video clips, 3D images and curriculum-based lesson plans. There were 4.7 million visits to **nature.ca** in 2004-05, (an increase of 34 percent over last year) and more than 29.9 million page views (up 45 percent from 20.6 million last year).



Photo: David R. Gray



Photo: Heidi Roberts

Alberta community wins Museums-Schools Partnerships Award

The Cold Lake Museum Project is the winner of the 2004 Museums-Schools Partnership Award, launched in 2003 by the Canadian Museum of Nature, and co-sponsored by the Canadian College of Teachers in collaboration with the Canadian Museums Association. Since 1998, the Cold Lake Museum Society has collaborated with scores of students and their teachers from Grand Centre High School to design and build a new gallery about the oil and gas industry, and to renovate other sections of the museum buildings, which were formerly part of a military radar site. Funding for the project came from local businesses and provincial grants with support from the Imperial Oil Business-Education Partnership programme.

Annual grants to support taxonomic research

Two grants were provided through the Nature Discovery Fund (NDF): one to study the soil-living nematodes in northern British Columbia old-growth rainforest and another to describe seven new plant bugs from British Columbia and Alberta. The NDF is a fundraising initiative to support taxonomic research.



Photo: courtesy Michel Poulin

Canadian Arctic Shelf Exchange Study

Canadian Museum of Nature researchers travelled across Canada, recovering fossils and minerals to reconstruct past species and analyze environmental changes. The Museum's experts also continued to participate in multidisciplinary research efforts in Canada's North in the CASES initiative, which is measuring changes in the ice cover, monitoring oceanic and climatic conditions, and studying marine ecosystems in an area of the Beaufort Sea known as the Mackenzie Shelf.

Ottawa to host Canada-Wide Science Fair in 2008

The Canada-Wide Science Fair 2008 (CWSF) selection committee unanimously chose Ottawa to host CWSF 2008, based on the proposal prepared by the volunteer bid committee, which includes a number of Canadian Museum of Nature staff. The Museum is also a sponsor for the national event.



Photo: Glacialis Productions (Martin Lederc)

High-definition cinema network

The Canadian Museum of Nature, as the Canadian partner of the CineMuse network, has developed a new business model for high-definition (HD) cinema in the Canadian museum community. The Museum continued to build the HD film inventory to support the needs of museum partners. An HD wildlife festival was planned with the Canadian Wildlife Federation for National Wildlife Week in April 2005. Despite the renovations underway at the Victoria Memorial Museum Building, the number of HD cinema viewers continued to increase this year, for a total of 31,009 compared to 25,476 in 2003-04.

A Long History of Sharing Knowledge

Photo: National Museums of Canada, NMC 77280



The Canadian Museum of Nature originated in the Geological Survey of Canada, formed in 1842 by Sir William Logan. In 1843, Sir William and his assistant, Alexander Murray, returned from their first field expedition – a geological survey of Southern Ontario and Quebec – with hundreds of specimens and nowhere to store them. Sir William's brother, a businessman, let him store the specimens in a room above a warehouse in Montreal. There he and Mr. Murray spent the rest of the year unpacking, labelling, cataloguing, and re-packing the specimens in numbered boxes – creating the Museum's first collection.

In 1851, Sir William developed a beautiful display of Canadian minerals of economic interest for the Great Exhibition of 1851 in London, England. The Survey's first exhibition work was enormously successful. "Of all the British Colonies," the Exhibition Committee declared, "Canada is that whose exhibition is the most interesting and the most complete." Sir William's enormous success in London strengthened public support for the Survey, and set a precedent for the Museum's popular travelling exhibitions.

In 1852, Sir William, his assistants and his collections were temporarily housed in various warehouses in Montreal. They moved into a mansion on St. Gabriel Street, which had been owned by Peter McGill, President of the Bank of Montreal. This building became the Museum's home for the next 30 years until it moved to George Street in Ottawa's Byward Market in 1881.

The years 1867-1907 were an exciting period of growth for the national Museum. The field officers studied, collected and reported on the country's topography, climate, flora and fauna, geology and mineral resources, as well as on Canada's Aboriginal peoples.

First purpose-built national museum

Commissioned by Sir Wilfred Laurier at the beginning of the 20th century, the Victoria Memorial Museum Building opened its doors to the public in 1912 with spectacular exhibits of Canadian minerals, birds and fossils in beautiful new display cases. The building commemorates Queen Victoria who died in 1901. Charles M. Sternberg discovered the bulk of the dinosaurs in the Museum's collections in southwestern Alberta and shipped them back to Ottawa. The skeleton of *Edmontosaurus* was the first dinosaur mounted for public display in Canada in 1913 and was on view until the dinosaur hall closed for renovation in January 2005.

Parliamentary connections

After a fire destroyed the Centre Block of the Parliament Buildings in 1916, the seat of government moved temporarily to the Victoria Memorial Museum Building. The House of Commons sat in the auditorium for four years while the Senate occupied the East Wing. Sir Wilfrid Laurier never returned to the Hill. He died in 1919 and his body lay in state surrounded by flags and flowers in the Museum's Auditorium.

The Victoria Memorial Museum Building has been designated the third most important heritage building in Canada by the Federal Heritage Building Review Organization, after the Parliamentary Library and the Centre Block.

New beginnings

The Canadian Museum of Nature became a Crown Corporation on July 1, 1990, with a new mandate to increase interest in, knowledge of, and appreciation and respect for, the natural world throughout Canada and internationally.

At that time, the Museum's operations were scattered over 13 buildings throughout the National Capital Region and its natural science collections were kept in uncontrolled environments. A long-term project was initiated to consolidate all collection-related operations into one purpose-built facility.

The Natural Heritage Building in Gatineau was inaugurated in May 1997. With its leading-edge technology, the new collections and research facility was designed according to advanced collection management and protection requirements in order to safeguard Canada's natural history collection.

Ten million specimens, including tiny dried flowers, delicate arrays of pinned insects and two-ton dinosaur fossils, were carefully packed and moved from different locations around the National Capital Region to the new facility. The Museum received a Canadian Museums Association Achievement Award for the move in 1998.

Public Works and Government Services Canada completed extensive stonework restoration at the Victoria Memorial Museum Building in 1997. This work was undertaken to preserve the façade of this historic building and to ensure the safety of staff and visitors. The City of Ottawa acknowledged this achievement with its Heritage Award in 1999.

Cross-Canada consultations and a comprehensive strategic planning process have resulted in a new vision of the national role and service of the Canadian Museum of Nature. The Museum is working to realize this vision in tandem with the renewal of its exhibition site, the Victoria Memorial Museum Building.



Performance Against Objectives in 2004-05



Our Vision

- ▶ to be an engaging and trusted source for developing an understanding of the natural world;
- ▶ to work as a catalyst in bringing together a Canada-wide network of natural history expertise;
- ▶ to encourage learning about the natural diversity of Canada; and
- ▶ to be a valued contributor to Canadian public policy on natural science issues.



To create and make accessible to the public relevant information about the environment and our place in it

The Museum's research activities will be fully integrated with other Museum functions, recognized by peers and the public, and a range of research activities will address environmental change. There will be a national Collections plan and the Museum will be recognized as an active participant in a national effort to make museum collections accessible and useful to Canadians across the country. The Museum's educational projects will be recognized by client groups and peers as a key source of relevant information about the environment and our place in it.

Create and make accessible programmes of research, collections development, documentation and services as well as a range of educational programmes and services that respond to and address the natural history issues of relevance to Canadians.

The Gee! in Genome exhibition opened at the Royal Alberta Museum in Edmonton in July, in Toronto at the Ontario Science Centre in October and at the Montreal Science Centre in January. The exhibition is a key component of the new national project, the *Nature of Humans* Project, focusing on genomics: the study of genes and their functions. The Genome suitcase displays continued to travel and, because of their popularity, Genome Canada is working with the Museum to expand this component. Host venues and regional partners used the suitcases to promote the exhibition and as an outreach tool for schools, conferences and special events.

The *Sila: Clue in to Climate Change* exhibition was displayed in Buenos Aires, Argentina, at a CIDA-sponsored conference on climate change. The *Sila* Web site was launched in November with 100 bilingual pages. It contains the content of the travelling exhibition as well as three downloadable school programmes for educators.

There were 4.7 million visits to the Museum's Web site **nature.ca** in 2004-05, an increase of 34 percent over last year. There were more than 29.9 million page views, up 45 percent from 20.6 million the previous year.

Ukaliq: The Arctic Hare was successfully launched in March 2005, hosted on **nature.ca** as part of the Virtual Museum of Canada, with the support of the Canadian Heritage Information Network. The *Ukaliq* Web site explores this little-known Northern mammal from biological, scientific and cultural points of view. The site contains games, activities, hundreds of photographs, video clips, 3D images and curriculum-based lesson plans.

The Museum's researchers were in the field across Canada, recovering fossils and minerals to reconstruct past species and analyze environmental changes. Museum science experts continued to participate in multidisciplinary research efforts in Canada's North in the CASES initiative led by Laval University, as well as other monitoring activities. Dr. Kathlyn Stewart received funding from the National Science Foundation to carry out analysis of Miocene fish faunas in conjunction with the Early Hominid initiative project based at the University of California (Berkeley). Several Museum researchers were awarded funds from the Natural Sciences and Engineering Research Council to support the work of graduate students.

The Museum continued to play an international leadership role in museum collection risk analysis, giving Risk Assessment Workshops for the San Diego Natural History Museum, National Museum of New Zealand Te Papa Tongarewa and Royal British Columbia Museum. Staff conducted a weeklong workshop in risk analysis at the Royal Library and National Archives of The Netherlands and provided consulting services. The American Museum of Natural History recently announced a comprehensive, multi-million dollar risk management strategy based on the Canadian Museum of Nature model.

The Canada-Wide Science Fair (CWSF) 2008 selection committee unanimously chose Ottawa to host CWSF 2008, based on the proposal presented by an eight-member bid team, which included co-chairs Dr. Paula Piilonen and Gilles Proulx with the Museum. Joanne DiCosimo accompanied the team to this year's Science Fair in St. John's, NFLD, in May to present the bid.

Parks Canada and the Museum developed a project to digitize biological collections of significance to the national parks system. This will enable the assessment and monitoring of the ecological integrity of a number of Canada's most important natural environments. Ultimately, the data will contribute to fulfillment of Canada's obligation under the United Nations Convention on the Conservation of Biological Diversity.

Educational programmes continued and were adapted as the renovation project evolved, for the benefit of school groups, tourists and local residents who visit the Victoria Memorial Museum Building throughout the year. Special "Castle Secret Tours" were developed to increase appreciation of the unique architecture and significant heritage status of this national treasure. This is in keeping with the overall goal of maintaining a vibrant open museum throughout the renovation project.

In October, 600 primary and secondary students, and teachers, from across Canada met Dr. Jane Goodall at the Museum to discuss issues related to wildlife and environmental conservation. This event was organized in partnership with the Jane Goodall Institute and the International Fund for Animal Welfare, and was filmed by the producers of the "Freaks of Nature" television series.



The Museum's Web site continues to be an authoritative, objective source of educational information. In 2004-05, new additions included a site on climate change (with teachers' resources), summaries of forums on genomics, and an interactive site about the Arctic hare, complete with games and activities for children.

Two grants were provided through the Museum's Nature Discovery Fund (NDF): one to study the diversity of soil-living nematodes in northern BC old-growth rainforest and another to describe seven new plant bugs from British Columbia and Alberta. The NDF is a fundraising initiative to support taxonomic research.

The Museum Centre for 3D Imaging scanned the skeleton bones of the Great Horned Owl for *Canadian Geographic*. These bones will be used for a television documentary: "Owls: Nature's Stealth Fighter." On behalf of the Canadian Conservation Institute, the 3D Centre is producing an exact digital copy of a fragile, 400-year-old Christian cross, excavated in Ferryland, Newfoundland.

The Museum continued to build the high-definition (HD) film inventory to support the needs of museum partners. An HD wildlife festival was planned with the Canadian Wildlife Federation for National Wildlife Week and is scheduled for April 2005. Despite renovations underway at the Victoria Memorial Museum Building, HD cinema attendance continued to increase this year, for a total of 31,009 compared to 25,476 in 2003-04.

Expand joint efforts with other federal agencies and portfolio partners to create and distribute information resources for diverse Canadian audiences.

The Museum once again served as chair of the Federal Biodiversity Information Partnership (FBIP), a network of seven federal departments and agencies with natural science interests. Two proposals for data coordination projects were approved: a database on Canadian mosquito species (led by the Museum) and a database on Canadian pollinator species (led by the Canada Food Inspection Agency). The FBIP Partnership Agreement was renewed for the next three years and work to secure the resources necessary to support this horizontal federal program continued throughout the year.

Performance Measures	Target	Achievement
Refereed publications produced by staff on issues of relevance to Canadians	32	45
New accessible electronic collection records	7,000	14,467
Transactions using Museum collections	10,000	9,917
Unique Web site visits	3,750,000	4,700,000
Products, publications and services created in partnership with federal agencies and partners	Maximize number	6
New education programmes developed are a source of key information about the environment as measured against attributes	Have 50% of attributes	Evaluation framework is under development

Objective Two**Contribute to building the capacity of Canadian natural history museums and other heritage agencies to respond efficiently and effectively to natural history issues of relevance to Canadians**

The Alliance of Natural History Museums of Canada (ANHMC) will have membership from all regions of Canada and a regular schedule of meetings. National strategies for collections and joint projects in research and education will be developed and implemented by the ANHMC. In addition, to address the broader needs of Canadians for museum products and services, a series of Museum-initiated projects with a variety of federal partners will be undertaken. The Museum's experience in these partnership ventures will be documented and shared with the museum and heritage communities.

Develop and implement national strategies for research, collections and education in consultation and collaboration with the Alliance of Natural History Museums of Canada, and other federal and external partners.

The Alliance of Natural History Museums of Canada was formally incorporated in February 2004. The Canadian Museum of Nature is one of 12 founding members of this dynamic new national network. Two key working groups were formed in order to pursue collaborative projects and develop joint strategies for Collections development and Communications.

An inventory of natural history collections was compiled and preliminary findings presented at a September meeting of the members. The Collections Working Group reviewed and quantified data from the collections survey carried out in late summer, and agreed on common interpretations for estimating collection counts by specimens and by collecting lot.

Members of the Alliance of Natural History Museums of Canada approved a communications strategy to encourage informed discussion with key stakeholders and decision makers on natural science and sustainability issues. The first phases were implemented and work is on-going.

The Museum assisted an Alliance of Natural History Museums of Canada partner, the Royal British Columbia Museum, with its comprehensive collections and risk assessment project.

The Museum joined forces with the Montreal Science Centre and fellow Alliance of Natural History Museums of Canada members the Yukon Beringia Interpretive Centre and the Royal Tyrrell Museum of Palaeontology to develop the *Ice Age Mammals* Project. The project includes a travelling exhibition and programming and is scheduled to open in June 2005 and move to the Montreal Science Centre in May 2006. This project is also an element of the national education project that includes the new *Fossil Gallery*, scheduled to open in the renovated West Wing in October 2006.

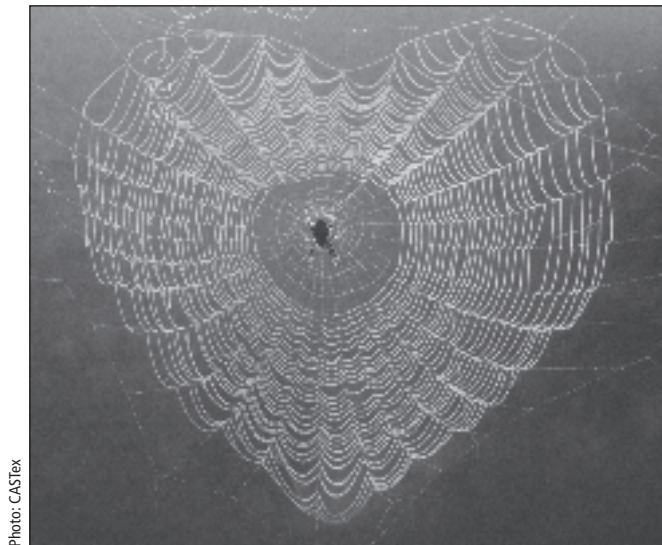


Photo: CASTex

Fatal Attraction, a travelling exhibition about animal courtship, is to be presented in North America by the Alliance of Natural History Museums of Canada.

The Museum successfully negotiated terms for the North American tour of *Fatal Attraction*, an exhibition on animal courtship co-produced by three members of CASTex, a European natural history and science museum network. It will be presented in North America by the Alliance of Natural History Museums of Canada and managed by the Canadian Museum of Nature. This initiative will build awareness and increase capacity for both natural history networks.

The 2004 Museums-Schools Partnership Award was awarded to the Cold Lake Museum Project in Alberta. The award was launched in 2003 by the Canadian Museum of Nature and co-sponsored by the Canadian College of Teachers in collaboration with the Canadian Museums Association. Since 1998, the Cold Lake Museum Society has collaborated with scores of students and their teachers from Grand Centre High School to design and build a new gallery about the oil and gas industry, and to renovate other sections of the museum buildings, which were formerly part of a military radar site.

Organize and deliver – with partners and other agencies at professional meetings such as the Canadian Museums Association (CMA) and the Canadian Association of Science Centres (CASC), etc. – reports and demonstrations of new processes, techniques and related capacities as examples of museum “best practices” and innovative approaches.

Sila: Clue in to Climate Change, was produced in partnership with the Centre for Traditional Knowledge, and launched in conjunction with the National Film Board’s new five-part documentary series on climate change: *Arctic Mission*. The complementary products allowed multi-site launches across Canada in Vancouver, Edmonton, Toronto, Montreal and Halifax on Earth Day in April 2004. The *Arctic Mission* film series is now part of the CineMuse high-definition film inventory and distribution network.

As part of Phase 2 Implementation of the Museum’s Community Biodiversity Stewardship Model, the Royal Saskatchewan Museum Associates will secure \$20,000 over two years from the Saskatchewan Heritage Foundation for the Frenchman River Biodiversity Project (FRBP) and an additional \$15,000 from Parks Canada. The Project will use these funds for community information sessions, training workshops, summer fieldwork, data analysis, public education products, and interim and final reports. The first issue of a project news bulletin *Biodiversity Update* was published.

Using funds raised through the Federal Biodiversity Information Partnership (FBIP), the Museum is leading a project of partner organizations to collect samples of Canadian mosquito species, fresh specimens and from historic collections, in order to assemble DNA profiles for each. The work is being done with the University of Guelph, the New Brunswick Museum, and the National Insect Collection at Agriculture and Agri-Food Canada (Experimental Farm).

As an active member of the Canadian Association of Science Centres, the Museum is engaged in an innovative process to develop a new travelling exhibition, “The Great Canadian Science Adventure”. Staff participated in the panel that presented the project in June 2004 at the CASC conference in Edmonton. Staff members were active participants at the conference and are assisting as members of the planning committee for CASC 2005 in Montreal. The Canadian Museum of Nature and the Canada Science and Technology Museum Corporation submitted a joint proposal to co-host the CASC conference in 2006.

Staff members were active participants in the 2004 annual conference of the Canadian Museums Association in Quebec City in May. Ten presentations were made on various topics and Staff participated in committees, attended special interest group meetings, and operated a booth at the CMA marketplace to promote the CineMuse high-definition film network and the Museum’s travelling exhibitions. The Museum also participated in organizing a special Alliance of Natural History Museums of Canada event at the conference.

The Museum participated in a Working Group on Museums and Sustainable Communities to plan a workshop and session at the 2005 CMA Annual Conference and developed a workshop outline. Staff attended planning meetings for the CMA 2006 conference in Saint John, New Brunswick. The Museum is developing the panel for a conference session to give European and North American perspective on partnerships projects and networks.

Performance Measures	Target	Achievement
Projects/activities undertaken with the Alliance of Natural History Museums of Canada	2	2
Participation in the Canadian Museums Association	Increase participation	38 person-days at Annual Conference and planning meetings (was 61 in 2003-04) 10 presentations at Annual Conference (was 4 in 2003-04)
Participation in the Canadian Association of Science Centres	Increase participation	21 person-days at Annual Conference and planning meetings (N/A in 2003-04) 3 presentations at Annual Conference (N/A in 2003-04)

Objective Three**Provide vehicles to encourage public engagement in natural history issues and to contribute to informed public policy on those issues**

The Museum will be regarded as a “Best Practices Leader” in engaging its key audiences through its exhibitions, public programming and the Web. The Museum will be recognized as a valued contributor in the development of public and government policies.

Create national forums to discuss, debate and share information on relevant environmental issues of concern to Canadians.

Public forums were held across Canada in conjunction with *The Gee!* in Genome Project. Subjects ranged from media coverage of genome science, stem cell research, the use of DNA in forensics, and other medical and social implications of genomics research. A total of nine forums were held in Regina, Saskatoon, Winnipeg, Edmonton, Calgary and Toronto, while Montreal hosted two days of extensive discussion groups. The Canadian Museum of Nature provided materials and “how to” support for these sessions undertaken by host venues as the Genome exhibition travelled across the country. Genome Prairie, the Ontario Genomics Institute and Genome Québec also assisted host venues with these forums.

A public forum on Climate Change was organized by the United Nations Association of Canada, in partnership with the Museum’s Canadian Centre for Biodiversity.

An all-party debate on environmental issues was held in the Museum Auditorium in June. The event was recorded and broadcast by the CPAC network.

Content was developed for a Web component on Canada’s Biosphere, part of the Diversity Showcase produced by culture.ca, Department of Canadian Heritage. The Web site launch is scheduled for May 2005 at Expo 2005, Aichi, Japan.

Develop and implement formal mechanisms to inform public policy on natural history issues.

The Canadian Centre for Biodiversity organized a two-day workshop in April for members of the International Union for the Conservation of Nature (IUCN) from Canada, the United States and the Caribbean.

A special meeting of the Canadian Committee for the International Union for Conservation of Nature (CC-IUCN) and IUCN members was held in October in preparation for the IUCN Congress held in November in Thailand. The CC-IUCN Annual General meeting was held in December 2004 at the Museum.

Staff members are co-leaders of the Working Group on Museums and Sustainable Communities, which established a learning network on the Federation of Canadian Municipalities Web site.

The Museum continued to take an active role on a number of federal government committees including Science and Technology, the Council of Science and Technology Advisors, Nature, Northern Science and Technology, Biodiversity, and Biodiversity Information.

A special publication, *LERE en nature* was launched in collaboration with the Association québécoise pour l'éducation relative à l'environnement, the Biosphere in Montreal and the Société de la faune et des parcs du Québec.

Demonstrate the commitment and involvement of the Alliance of Natural History Museums of Canada and other partners in defining and presenting public policy options to Government.

The Museum Research Summit, a special meeting of about 200 museum professionals from across Canada, was convened in Ottawa in January 2005 by the Canadian Museums Association. The Museum and Alliance of Natural History Museums of Canada partners were involved throughout the Summit in coordinating, facilitating and presenting sessions.

The Museum is a member of a planning group working under the auspices of the CMA to develop a national programme and raise funds to support the role of research at museums in Canada.

Performance Measures	Target	Achievement
Developed new forums/vehicles to encourage engagement of Canadians	5	2
Involved in national and international associations and organizations related to environmental change	20 associations	23 associations
Was a proponent in options on public policy being presented to Government	2	5

Objective Four**Develop the Museum's internal capacity to work in integrated, collaborative approaches**

A Human Resources Framework and the necessary HR tools will be in place to support the Museum's business strategy. A majority of projects will be undertaken with partners. The Museum will provide a supportive working environment with opportunities for innovation and growth.

Through the application of the competency-based process, enable Museum Staff to work in integrated approaches such as partnerships, networks and multi-disciplinary teams. This approach will be evident in ongoing programmes of training, succession planning, staffing and improved performance management.

The Human Resources Management Framework was revised and updated in May. Orientation sessions were offered to assist Staff with the incorporation of core competencies into their annual performance objectives. A self-assessment tool was provided to help Staff determine their level of proficiency in each competency.

A succession Management Plan was initiated. The Planning Team met and developed tools to gather the pertinent data. Phase 1 was completed and Phases 2 and 3 will be completed in 2005-06, with the final Phase (maintenance) to be in place in 2006-07.

Performance indicators and an accountability framework were formulated to evaluate the Museum's success in meeting its HR Framework priorities for 2004-05. Development of a methodology for including core competencies in the staffing process was undertaken. The model will be finalized in 2005-06.

A review is underway to document the Museum's current work in networks, partnerships and joint ventures and to assess these in order to develop future strategies. This evaluation will be completed by the end of 2005.

Apply the partnership framework to assess current partnerships and to modify partnership arrangements as required.

In 2004, the Museum developed a Partnership Grid to ensure that existing and future partnerships have the critical elements identified as being essential for success.

Eleven partnerships developed in the previous fiscal (2003-04) were assessed using the Partnership Grid. A combined average score of 63.9 over 110 points was achieved for an average rating of 58 percent. The analysis revealed that improvements could be achieved by increasing savings, increasing the return on investments and leveraging project objectives.

Photo: Martin Lipman



Manager of Exhibitions Monty Reid addresses staff at a consultation session. In 2004-05, the Museum continued to improve integrated approaches to partnerships, networks and internal working teams.

New partnerships were implemented with The Manitoba Museum and the Royal Ontario Museum to expand the Museum’s Membership Programme through reciprocal agreements. The Museum and Canada Post entered into a partnership for the transportation of *Sila: Clue in to Climate Change*, co-produced with the Centre for Traditional Knowledge.

The Museum successfully negotiated terms for the North American tour of *Fatal Attraction*, an exhibition on animal courtship co-produced by three members of CASTEx, a European natural history and science museum network. It will be presented in North America by the Alliance of Natural History Museums of Canada and managed by the Canadian Museum of Nature. This initiative will build awareness and increase capacity for both natural history networks.

Performance Measures	Target	Achievement
Days of professional development per employee	4	5.04
Value of new partnerships against criteria	Address 50% of established criteria by 2008-09	Average rating of 58%

Objective Five**Ensure that the Victoria Memorial Museum Building Renewal Project furthers the vision**

The Victoria Memorial Museum Building physical and programming renovation will be completed on schedule and within budget parameters while remaining open to the public. The safety and health of visitors, staff and collections will be ensured during the project. The project will demonstrably support the Museum programming and corporate objectives.

Address the Health and Safety Infrastructure requirements for the Victoria Memorial Museum Building.

Phase 1 was completed. Phases 2 and 3, which are being completed simultaneously, are underway. The West Wing of the Museum was closed, with all exhibitions in this wing dismantled, demolished or stored for future re-installation. Construction of the South Wing was begun. The project is 2.5 months behind schedule. To deal with this delay and to reduce costs, the construction of the Lantern, and renovation of the central Atrium and the rehabilitation of the East Wing. (Phases 4 and 5) will be completed in the same time frame rather than undertaken sequentially.

The results of the tenders for steel, concrete and drywall exceeded the Class B estimates significantly. This was the result of market conditions, specifically the escalation in the prices of construction materials, particularly steel and concrete. Cost mitigation strategies including the collapsing of phases 4 and 5 and the reconsideration of interior finishing.

The Museum hosted quarterly public information sessions to consult with the public on the planned renovations as part of the site planning and approval process, as well as to provide updates to the community on the progress of the construction.

The Visitor Experience working document is being prepared for external distribution, in order to share learning with other institutions across Canada. Production of a video to document the various aspects of the Renewal Project was undertaken.

Create a review mechanism to ensure that planning and programming decisions for the Victoria Memorial Museum Building are made in line with the principles of the new vision.

The Museum undertook a formal re-assessment of its functional programming requirements before approving the construction documents for the rehabilitation of the Victoria Memorial Museum Building. In addition, strategies were developed to create appropriate programming throughout the Renewal Project.

Photo: CMN Archives



Conservation and rehabilitation of the Museum's mammals dioramas, considered historic treasures, began in 2004. These will be restored and showcased in the Museum's refurbished West side, which will re-open in October, 2006.

Co-develop *Water, Nature of Humans* Projects and other programming with other museum partners, with elements located in Ottawa, as well as elsewhere in Canada.

The Museum completed a telephone survey with over 1,000 Canadians to provide background for concept planning on the *Nature of Humans* Project. Discussions were held with the Canadian Medical Hall of Fame, Science World, Health Canada, Canadian Stroke Network, Ottawa Life Sciences Council, the Canadian Institutes for Health Research, and Genome Canada regarding potential collaborations for this project.

The new *Fossil Gallery* proceeded on schedule for opening in 2006. Major contracts were let for illustrations and interactive exhibits for the *Fossil* Project; the *Extinction* film is in production; text for the learning stations was completed; and exhibition text is under development.

New galleries for the Birds and Mammals dioramas were designed and detailed planning is underway for the conservation, rehabilitation and restoration move of these heritage features.

The *Water* Project was introduced to potential partners at the Science Writers Meeting in Toronto and Canadian Water Network meetings in Ottawa.

Maintain a base level of programming and visitor services at the Victoria Memorial Museum Building during the Renewal Project to ensure that the Museum and the Victoria Memorial Museum Building remain visible and that the local audience is retained.

Work on the *Ice Age Mammals* national travelling exhibition proceeded on schedule. This project was undertaken in partnership with the Montreal Science Centre, the Yukon Beringia Interpretive Centre and the Royal Tyrrell Museum of Palaeontology, and will open in June 2005.

The Great Canadian Science Adventure, scheduled for installation in the new changing exhibitions gallery in the West Wing, is being co-developed with partners from the Canadian Association of Science Centres.

In conjunction with the Alliance of Natural History Museums of Canada, the Museum will bring a major exhibition, *Fatal Attraction*, from Europe to tour North America beginning in 2006.

A new fee structure was implemented to address gallery closures and visitor inconvenience during the renovation of the Victoria Memorial Museum Building.

New interpretive concepts and spaces were tested to allow visitors to watch work in progress on the new *Fossil Gallery*. Plans were developed to move and re-install visitor amenities such as food services and gift shop in conjunction with temporary exhibition projects. Marketing and promotional strategies supported this integrated approach that blends the Renewal Project activity with programming.

Performance Measures	Target	Achievement
Victoria Memorial Museum Building physical and programming renovation completed on schedule	Phases 1&2 completed by end of 2006-07 Phases 3&4 completed by end of 2008-09 Phase 5 completed in June 2009	Phase 1 completed, Phase 2 underway for completion in June 2006 Phase 3 underway for completion in November 2005
Visits to the Victoria Memorial Museum Building and visits to the Natural Heritage Building	170,000 (VMMB) 1,100 (NHB)	189,467 (VMMB) 825 (NHB)
Average market share of visitors to national museums in the National Capital Region	15% by end of 2008-09	7.8% by end of 2004-05

Figure 1 – Audience Reach

	2004-05 Actual	2003-04 Actual	2002-03 Actual	Variation % 2004-05 vs 2003-04	2005-06 Projected
Local Attendance (after-hour, open-hour, NHB, NCR)	211,960	267,638	290,504	-20.8%	171,000
High attendance venues	322,800	312,800	450,900	3.2%	250,000
Multi-media (TV)	137,500	833,000	1,181,000	-83.5%	100,000
Unique Web site visits	4,731,652	3,531,060	3,021,113	34.0%	3,000,000
Traveling Exhibits	204,400	352,400	370,900	-42.0%	300,000
Purchase CMN products	17,041	178	3,747	9473.6%	800
Number of school group visits ⁽¹⁾	808	1,016	1,022	-20.5%	650
Number of participants in school group visits ⁽²⁾	33,705	42,366	42,637	-20.4%	27,000
Number of people participating in guided tours	1,355	2,666	3,180	-49.2%	700
Number of people participating in workshops	8,155	10,407	8,033	-21.6%	4,400

NOTE:

(1) The number of school group visits for fiscal year 2004-2005 is an estimate based on 2003-2004's ratio of participants per group.

(2) Number of participants in school group visits includes guided tours, self-guided tours and unguided tours. It does not include the Nature Workshops.

Objective Six**To maintain and improve an effective and efficient infrastructure of systems and facilities**

The Museum will ensure that all support systems of the institution promote maximum effectiveness and efficiency of operations and enable all work units to maximize their contribution to the service and value of the Museum to Canadians.

Administer real property.

The recent Treasury Board Secretariat benchmark review of real property costs for national collections institutions recognized that the Canadian Museum of Nature has a significant shortfall in funds to operate and repair its properties. Based on international benchmark comparisons, the Museum has the lowest cost-per-square-metre for facilities and security operations of similar museums.

The existing contracts with Public Works and Government Services Canada (PWGSC) to operate the Natural Heritage Building and the Victoria Memorial Museum Building were re-negotiated and reviewed to determine whether further savings could be achieved.

A project to correct seismic protection at the Natural Heritage Building is being performed as warranty work. An agreement on the work terms and conditions was signed with Groupe Axor and work is underway.

The long-term building maintenance plan was reviewed. Base building operations and essential maintenance for the Museum's two Buildings was performed. The emergency plan for the Natural Heritage Building was updated as a result of revisions to the Canada Labour Code and information sessions were provided to emergency wardens.

The Health and Safety Committees completed significant consolidation of documentation for both emergency planning and response, and assessment of risk analysis and mitigation at the two building sites. A Museum Risk Grid and a new NHB Emergency Manual were prepared.

The Natural Heritage Building in Gatineau, Quebec houses the Museum's natural history collections, its research labs, its library and archives, its administration, public education as well as the 3D Imaging Centre.



Photo: Martin Lipman

Develop, modify or consolidate management and planning processes to support the vision.

The Museum consolidated its strategic planning for the new vision, the Corporate Plan and the annual Operating Plan within a five-year planning framework. The framework defines critical objectives, priorities and performance measures over this five-year period and integrates business planning processes to establish key deliverables and allocate resources. A centralized review process was introduced to assess business cases and set annual operating plans within this multi-year framework.

A Management Control Framework was developed to articulate key criteria and expectations for good management practices. Taken from a number of public and private sector models, the framework will be used to guide decision-making. Work began on a comprehensive Succession Management Plan for key positions at the Museum.

A Long Term Capital Plan (LTCP) was developed, providing a consolidated ten-year projection of capital and related operating requirements for all capital asset classes under the administration of the Museum. The LTCP also described the Museum's management practices to maintain the alignment between its capital asset base and programme activity.

The Museum approved a new Code of Values and Ethics that draws upon the Public Service Code of Conduct and incorporated Museum-specific requirements.

The Market Research function was audited as part of the internal audit programme. An environmental analysis and a study of target audiences are underway, along with the development of a long-term plan for market research and visitor studies.

Maintain and improve Museum information management systems and services.

The Museum completed an updated five-year Information Technology Strategic Plan that outlines the direction and priorities for the future development of the Museum's IT capabilities. An "IT Scorecard" was developed that is now included in the Museum's quarterly reports to quantify and improve the performance of the Museum's IT function.

Staff completed the design for the physical layer of the IT infrastructure in the renovated Victoria Memorial Museum Building, as well as a "Statement of Sensitivity" (SoS) analysis of the Museum's IT assets (the first phase of a more formal IT Security programme).

Staff established an internal Web platform and launched a Succession Management tool and other Web-based tools on the platform. They also established standards for the set-up and configuration of Wireless networking in one of the Museum's collections areas (greatly facilitating data entry based on the shelved collections); set up a network storage framework to manage and backup key Research and Collections data; completed Phase 1 (mixed mode) migration of the Network Operating System to Windows 2003 Server; and acquired core components of a Digital Asset Management system to help the Museum manage images and other digital assets.

Performance Measures	Target	Achievement
Real property costs per gross square metre (See Figure 2)	Meet or exceed the recognized and accepted industry level for museums	The average cost for for the Victoria Memorial Museum Building was \$108.70 and \$68.59 for the Natural Heritage Building
Integrate strategic and operational planning time	50% reduction in planning time	Baseline data is being gathered
Cost per user	\$5.83 per user (when including Web users) \$16.24 per user (when excluding Web users)	\$3.97 per user (when including Web users) \$16.24 per user (when excluding Web users)
Monitor information management systems performance	A scorecard was developed to evaluate the overall performance of the Museum's Information Management and Information Technology Systems	4 of 15 performance metrics have not met the established standard

Figure 2: Operating and Maintenance Costs Per Gross Square Metre

Cost/square metre (US\$)	Natural Heritage Building	4 other archival institutions	Victoria Memorial Museum Building	16 other history museums	Average 2004 (all types of facilities)	Average 2003 (all types of facilities)	Same-size facilities
Average cost	68.59	95.16	108.70	129.52	149.36	142.24	143.31

Objective Seven**Increase the Museum's self-generated revenue**

The Museum will access additional resources in order to enhance its programme of services and its value to Canadians. The Museum will have a budget in place for its fixed infrastructure costs that allows for prudent investment and well-managed implementation of its long-term capital plan and maintenance of infrastructure. Revenue generating and commercial operations opportunities will be realized and on-going.

Build a strong philanthropic base of support for the Museum by identifying and securing private and public sponsorships, partnerships, alliances and donations.

The *Natural Partnerships* Campaign focused on the leadership prospects identified for the priority projects: *Fire and Ice (Fossil Gallery)* and *Nature of Humans*. Meetings were held in Calgary, Edmonton, Winnipeg, Toronto, Ottawa and Montreal with project advisors and prospects for both priority projects, and special effort was placed on cultivation and solicitation activities held in conjunction with the opening of the *The Gee! in Genome* exhibition in four of the cities listed above. The Museum augmented the host venue functions with VIP events and held individual meetings with potential partners.

Cumulative pledges from the start of the Campaign to the end of March 2004 total \$4.5 million. This year TransCanada Corporation confirmed support for two identical *Fire and Ice* suitcase exhibits and Power Corporation pledged its support for the *Nature of Humans* Project.

Develop, market and maximize education, collection, research and commercial products and services.

The Museum membership national households reached over 2,100 with revenue significantly surpassing our expectations. A Members Appreciation event in November drew 277 people.

A new amendment to the contract between the Museum and CineMuse was negotiated to expand the current relationship, reflecting experience to date and the new business orientation. The Museum took on responsibilities for the CineMuse HD library management while CineMuse guaranteed a steady revenue stream for the next fiscal year.

Lichens from Quebec were identified for La Société de la faune et des parcs du Québec as part of two contracts with a revenue of \$12,000.

Performance Measures	Target	Achievement
Results of fundraising efforts	\$3,268,000	\$652,507
Results of revenue generating activities	\$851,350	\$1,936,749
Per visitor gross sales income	\$3.86	\$4.70

Canadian Museum of Nature People

Natural Partnerships Campaign
Co-Chairs Claudia and Adam Chowaniec
are helping the Canadian Museum
of Nature to fulfill the new vision
of national service.

Photo: Lynn Ball, The Ottawa Citizen. Reprinted with permission.



The Museum is especially grateful to the following individuals who have assisted the *Natural Partnerships Campaign* over this past year:

Dr. John ApSimon
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Lucia Dolcetti
Dr. Rainer Engelhardt
Dr. Philippe Haziza
Brendan Hawley
Franklin Holtforster
Lisa Holzman
Joanne Johnson
Patrick Lafferty
Frank Ling
David MacInnis
Judith Manley
John R. McDougall
Dr. Peter Morand
Dr. Andrew Pipe
Lawrence E. Smith
Peter Strum

“The Canadian Museum of Nature is more than an institution: it’s a national jewel. And the task of sharing it with more people begins with people.”

Claudia Chowaniec

The *Natural Partnerships Campaign* will provide critical support for the Museum’s renewal strategy by raising \$10 million from partners and individual donors to develop topical new permanent galleries, create dynamic travelling exhibitions and present innovative public education programmes. Priorities for the current phase of the campaign are: the *Nature of Humans Project*, the *Fossil Project*, the *Water Project*, and the *Discovery Centre Project*.

Board of Trustees

The Board of Trustees is CMN's governing body, responsible to Parliament through the Minister of Canadian Heritage. The 11 members are Governor-in-Council appointees from all regions of Canada. Through accountability and strategic policy and planning frameworks, the Board provides corporate direction and delegates authority to the President for the management of CMN. In 2004-05, the Board met four times and held three special meetings through conference calls. Twenty meetings of the Committees of the Board were held either in person or by conference call. Mr. R. Kenneth Armstrong, a long-serving Board member, was appointed Chair in February 2005.

Standing Committees

Executive Committee

Louise Beaubien Lepage
A/Chair (until February 28, 2005)

R. Kenneth Armstrong
Chair (effective February 29, 2005)

Mandate: The Executive Committee is responsible for monitoring the activities of the Board of Trustees and its Standing Committees, for conducting the President's annual performance review and for evaluating the effectiveness of the governance structure/system. The Executive Committee acts on behalf of the Board between meetings, in accordance with Board policy.

Audit and Finance Committee

R. Kenneth Armstrong
Chair (until March 3, 2005)

Johanne Bouchard
Chair (effective March 4, 2005)

Mandate: The Audit and Finance Committee is responsible for ensuring the Museum's compliance with legal, fiscal and audit requirements established for CMN by the Government of Canada, for recommending additional policies in these areas as appropriate, and for guiding and supporting CMN's efforts to develop a skilled, productive and effective workforce.

Community and Government Relations Committee

Patricia Stanley Beck
Chair (until February 24, 2005)

Roy H. Piovesana
Chair (effective March 4, 2005)

Mandate: The Community and Government Relations Committee is responsible for raising and sustaining in the national community a positive awareness of CMN, its services and its contributions, and for guiding and supporting CMN's efforts to generate revenue.

Nominating Committee

Louise Beaubien Lepage
Chair

Mandate: The Nominating Committee is responsible for the Board and Trustee assessment and training, and for recommending individuals to be nominated for appointment or reappointment as Trustees, in accordance with the Treasury Board appointment process for Crown corporations.

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The involvement and support of volunteers helps to make the CMN a richer and more vibrant institution. This year 200 volunteers contributed over 10,000 hours in support of Museum programming.

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Communicating Research Results

Photo: Laura Surin



Research Services and Collections Services Staff

CMN staff published 45 articles in refereed journals – which have other scientists review all articles submitted before they are accepted for publication – and 28 in non-refereed publications, 11 reports and 22 other papers. A complete list follows (names in boldface are CMN staff members):

Publications are listed in the language in which they were written.

Refereed Publications

- Brysting, A.K., M.F. Fay, I.J. Leitch and **S.G. Aiken**. 2004. One or more species in the arctic grass genus *Dupontia*? – A contribution to the Panarctic Flora project. *Taxon*, 53: 365-382.
- Alfonso, N.R.** 2004. Evidence for two morphotypes of lake charr (*Salvelinus namaycush*) from Great Bear Lake, Northwest Territories, Canada. *Environmental Biology of Fishes*, 71:21-32.
- Carlton, C.E. and **R.S. Anderson**. 2004. Occurrence of the introduced weevil *Myosides seriehispidus* Roelofs in Great Smoky Mountains National Park (Coleoptera: Curculionidae). *The Coleopterists Bulletin*, 58:343.
- Viquez, C. and **R.S. Anderson**. 2004. A second species of the genus *Cholomus* Roelofs (Curculionidae) from Central America. *The Coleopterists Bulletin*, 58:369-371.
- Anderson, R.S.** and **B.A. Korotyaev**. 2004. Some Palearctic weevils in the subfamily Ceutorhynchinae (Coleoptera, Curculionidae) recently discovered in North America. *The Canadian Entomologist*, 136:233-239.
- Coad, B.W.** and B.Ya. Vilenkin. 2004. Co-occurrence and zoogeography of the freshwater fishes of Iran. *Zoology in the Middle East*, 31:53-61.
- Gilhen, J., **B.W. Coad** and A. Hebda. 2004. The chain dogfish, *Scyliorhinus retifer* (Garman, 1881), new to the Canadian Atlantic ichthyofauna. *Canadian Field Naturalist*, 117(3):475-477.
- Coad, B.W.** and N. Keyzer-de Ville. 2004. On the systematics and distribution of the snow trout *Schizothorax pelzami* Kessler, 1870 in Iran (Actinopterygii: Cyprinidae). *Zoology in the Middle East*, 32:57-62.
- Kim, S.L., **K.E. Conlan**, D.P. Malone and C.V. Lewis. 2005. Possible food catching and defence in the Weddell seal: observations from McMurdo Sound, Antarctica. *Antarctic Science*, 17(1): 71-72.
- Conlan, K.E.** and R.G. Kvitek. 2005. Recolonization of ice scours on an exposed Arctic coast. *Marine Ecology Progress Series*, 286:21-42.
- Conlan, K.E.**, S.L. Kim, H.S. Lenihan and J. S. Oliver. 2004. Benthic changes over ten years of organic enrichment by McMurdo Station, Antarctica. *Marine Pollution Bulletin*, 49:43-60.
- Rastogi, T., M.W. Brown, B.A. McLeod, T.R. Frasier, R. Grenier, R., **S.L. Cumbaa**, J. Nadarajah and B.N. White. 2004. Genetic analysis of 16th-century whale bones prompts a revision of the impact of Basque whaling on right and bowhead whales in the western North Atlantic. *Canadian Journal of Zoology*, 82:1647-1654.
- Danks, H.V.** 2004. The roles of insect cocoons in cold conditions. *European Journal of Entomology*, 101(3):433-437.
- Danks, H.V.** 2004. Seasonal adaptations in arctic insects. *Integrative and Comparative Biology*, 44(2):85-94.
- Danks, H.V.** 2005. Insect Larvae. In M. Nuttall, *Encyclopedia of the Arctic*. New York: Routledge. 3 vols. (pp. 978-979).
- Danks, H.V.** 2005. Insects. In M. Nuttall, *Encyclopedia of the Arctic*. New York: Routledge. 3 vols. (pp. 979-980).
- Danks, H.V.** 2005. Mosquitoes. In M. Nuttall, *Encyclopedia of the Arctic*. New York: Routledge. 3 vols. (pp. 1322-1323).
- Tait, K.T., F.C. Hawthorne, **J.D. Grice**, L. Ottolini and V.K. Nayak. 2005. Dellaventuraite, NaNa₂(MgMn³⁺+Ti⁴⁺+Li)Si₈O₂₂O₂, a new anhydrous amphibole from Kajlidongri Manganese Mine, Jhabua District, Madhya Pradesh, India. *American Mineralogist*, 90:304-309.
- Roberts, A.C., T.M. Seward, E. Reusser, G.J.C. Carpenter, **J.D. Grice** and S.M. Clark. 2004. Eyselite, Fe³⁺Ge⁴⁺₃O₇(OH), a new mineral from Tseumb, Namibia. *Canadian Mineralogist*, 42:1771-1776.
- Gault, R.A., T.S. Ercit, J.D. Grice** and **J. Van Velthuisen**. 2004. Manganokukisvumite: a new mineral from Mont Saint-Hilaire, Quebec. *Canadian Mineralogist*, 42:781-786.
- Petersen, O.V., O. Johnsen, **R.A. Gault**, G. Niedermayer, G. and **J.D. Grice**. 2004. Taseqite, a new member of the eudialyte group from the Ilímaussaq alkaline complex, South Greenland. *Neues Jahrbuch für Mineralogie, Monatshefte*, 83-96.
- Tait, K.T., F.C. Hawthorne, **J.D. Grice**, J.L. Jambor and W.W. Pinch. 2004. Potassic-carpholite, a new mineral species from the Sawtooth batholith, Boise County Idaho, U.S.A. *Canadian Mineralogist*, 42:121-124.
- LeBlanc, M. K. Gajewski and **P.B. Hamilton**. 2004. A diatom-based Holocene paleoenvironmental record from a mid-arctic lake on Boothia Peninsula, Nunavut, Canada. *Holocene*, 14:417-425.
- Hamilton, P.B.**, P.A. Siver and C. Reimer. 2004. *Neidium rudimentarum* Reimer, a rare species with novel rudimentary canals and areolar openings from the temperate region of North America. *Rhodora*, 106:33-42
- Bouchard, G., K. Gajewski and **P.B. Hamilton**. 2004. Freshwater diatom biogeography in the Canadian Arctic Archipelago. *Journal of Biogeography*, 31:955-973.
- Hamilton, P.B.**, L.M. Ley, S. Dean and F.R. Pick. 2005. The occurrence of the cyanobacterium *Cylindrospermopsis raciborskii* in Constance Lake: an exotic cyanoprokaryote new to Canada. *Phycologia*, 44:17-25.
- Peter, A., P.A. Siver, **P.B. Hamilton**, K. Stachura-Suchoples and J.P. Kociolek. 2005. *Diatoms of North America: The Freshwater Flora of Cape Cod*. A.R.G. Ganter, Ruggell. 512 pp.
- Hendrycks, E.A.** and E.L. Bousfield. 2004. The amphipod family Pleustidae (mainly subfamilies Mesopleustinae, Neopleustinae, Pleusymtinae, and Stenopleustinae) from the Pacific coast of North America: systematics and distributional ecology. *Amphipacifica*, 3(4):45-113.



Photo: Robert Zeran

McGill University student Rebecca Zeran uses a flight-intercept trap to capture beetles that she will classify as part of her research supported by the Museum's Nature Discovery Fund. In 2003, she won a prize for her systematics research from the Entomological Society of Ontario.

Tomikawa, K., **E.A. Hendrycks** and S. F. Mawatari. 2004. A new species of the genus *Dactylopleustes* (Crustacea: Amphipoda: Pleustidae) from Japan, with a partial redescription of *D. echinoides* Bousfield and Hendrycks, 1995. *Zootaxa*, 674:1-14.

Sutter C.G., D.J.F. Martz, **Lauriault, J.**, R.A. Sisson and J. Burman. 2005. Mutual Trust in community-based Ecosystem Management, Prairie Forum, *Journal of the Canadian Plains Research Centre*. 30(1):73-84.

Murray, A.M. 2004. Osteology and morphology of the characiform fish *Alestes stuhlmannii* Pfeffer 1896 (Alestidae) from the Rufiji River basin, East Africa. *Journal of Fish Biology*, 65:1412-1430.

Murray, A.M. 2004. Late Eocene and early Oligocene teleost and associated ichthyofauna of the Jebel Qatrani Formation, Fayum, Egypt. *Palaeontology*, 47(3):711-724.

Murray, A.M. and Y.S. Attia. 2004. A new species of Lates (Teleostei: Perciformes) from the lower Oligocene of Egypt. *Journal of Vertebrate Paleontology*, 24(2):299-308

Piilonen, P.C., D.G. Rancourt, R.J. Evans, A.E. Lalonde, A.M. McDonald and A.A.T. Shabani. 2004. The relationships between crystal-chemical and hyperfine parameters in astrophyllite-group minerals: A combined ⁵⁷Fe Mössbauer spectroscopy and single-crystal X-ray diffraction study. *European Journal of Mineral*, 16:989-1002.

Piilonen, P.C., F. Farges, R.L. Linnen and G.E. Brown Jr. 2005. Tin and Niobium in Dry and Fluid-Rich (H₂O, F) Silicate Glasses. *Physica Scripta*, Vol. T115:405-407.

Riaux-Gobin C. and **M. Poulin**. 2004. Possible symbiosis of *Berkeleya adeliensis* Medlin, *Synedropsis fragilis* (Manguin) Hasle et al. and *Nitzschia lecointei* Van Heurck (Bacillariophyta) associated with land-fast ice in Adélie Land, Antarctica. *Diatom Research*, 19:265-274.

Poulin M. (Editor). 2004. *Proceedings of the Seventeenth International Diatom Symposium*. Bristol, England: Biopress Ltd. 481 pp.

Crawford R., R. Jahn and **M. Poulin**. 2004. Workshop report – Diatom collections of the world. Safeguarding their material and disseminating their information In: M. Poulin, *Proceedings of the 17th International Diatom Symposium*, (pp. 467-468). Bristol, England: Biopress Ltd.

Poulin M., G. Massé, S.T. Belt, P. Delavault, P., F. Rousseau, J.-M. Robert and S.J. Rowland. 2004. Morphological, biochemical and molecular evidence for the transfer of *Gyrosigma nipkowii* Meister to the genus *Haslea* (Bacillariophyta). *European Journal of Phycology*, 39:181-195.

Renaud, C.B., A.L. Martel, K.L.E. Kaiser and M.E. Comba. 2004. A comparison of organochlorine contaminant levels in the zebra mussel, *Dreissena polymorpha*, versus its unionid attachment, *Elliptio complanata*, in the Rideau River, Ontario. *Water Quality Research Journal of Canada*, 39(2): 83-92.

Renaud, C.B., N. Alfonso, K.L.E. Kaiser and M.E. Comba. 2004. A comparison of organochlorine contaminant levels, on a lipid basis, in sea lamprey larvae from Mad River, Lake Huron basin and Michipicoten River, Lake Superior basin (1960-1976). *Water Quality Research Journal of Canada*, 39(2):75-82.

Stewart, K.M. 2004. Senga 5a fish fauna revisited. *Archaeofauna*, 13:145-154.

Waller, R. and S. Michalski. 2004. Effective Preservation: From Reaction to Prevention. *Getty Conservation Institute Newsletter*, 19(1):4-9.

Waller, R. 2005. Seeking balanced risk mitigation: Risk assessment at the Canadian Museum of Nature (pp. 129-136). In: J. Wellheiser and N. Gwinn, *Proceedings of the IFLA Berlin 2003 Preconference: Preparing for the Worst, Planning for the Best: Protecting our Cultural Heritage from Disaster*. München, Germany: K.E. Saur.

Cheng, Y.-n., **X.-C. Wu** and Q. Ji. 2004. Triassic marine reptiles gave birth to live young. *Nature*, 432: 383-386.

Non-refereed Publications

Mallory, C. and **S. Aiken**. 2004. Common plants of Nunavut. Nunavut Department of Education. National Printers Nepean, Canada.

Aiken, S. and **M. LeBlanc**. 2004. Report to Nunavut Research Institute on Filed work done on Southern Baffin Island. July, 2004.

Coad, B.W. 2004. Review of Trout and Salmon of North America by R.J. Behnke, illustrated by J.R. Tomelleri. 2002. *Canadian Field-Naturalist*, 117(2):318-319.

Coad, B.W. 2004. Review of Bigelow and Schroeder's Fishes of the Gulf of Maine edited by B.B. Collette and G. Klein-MacPhee. 2002. Smithsonian Institution Press, Washington and London. Third Edition. *Canadian Field-Naturalist*, 117(2):319-320.

Coad, B.W. 2004. Review of The Rockfishes of the Northeast Pacific by M.S. Love, M. Yoklavich and L. Thorsteinson with contributions from J. Butler. 2002. University of California Press. *Canadian Field-Naturalist*, 117(2):323-324.

Coad, B.W. 2004. Review of Caviar: The Strange History and Uncertain Future of the World's Most Coveted Delicacy by I. Saffron. 2002. *Canadian Field-Naturalist*, 117(2):324-325.

Danks, H.V. 2004. Newsletter of the Biological Survey of Canada (Terrestrial Arthropods), 23(2):51-89.

Danks, H.V. 2004. Biological Survey report. Bulletin of the Entomological Society of Canada, 36(3):130-133.

Danks, H.V. 2005. Newsletter of the Biological Survey of Canada (Terrestrial Arthropods), 24(1):1-36.

Danks, H.V. 2005. Arthropods of Canadian Grasslands No. 11, 29 pp.

Danks, H.V. 2005. Biological Survey report. Bulletin of the Entomological Society of Canada, 37(1):45-47.

Graham, M. 2005. The Museum is a Place for Research: A Report on the Museum Research Summit/ Les musées sont des lieux de recherche : Un compte-rendu du Sommet sur la recherche muséale. Muse, March/April: 5-6.

Graham, M. 2004. Update from the Museum of Nature/Quoi de neuf au Musée canadien de la nature ? Bulletin of the Canadian Society of Zoologists, 35(1):16-17.

Graham, M. 2004. So Much of Diverse, Living World Remains to be Discovered. Ottawa Citizen, April 12, 2004. p. A11.

Martel, A., and I. Picard. 2005. The hickorynut mussel, *Obovaria olivaria*, a deepwater unionid under scrutiny in Canadian rivers. Tentacle, IUCN Newsletter – Species Survival Commission, Mollusc Specialist Group. February 2005.

Martel, A. and **J.B. Madill**. 2005. The Gatineau tadpole snail, *Physa gyrina litchfordi*, in Meech Lake, Gatineau Park (Québec): a larger population than originally thought. Tentacle, IUCN Newsletter – Species Survival Commission, Mollusc Specialist Group. February 2005.



Photo: Steve Cumbaa

Wet weather could not stop CMN's intrepid palaeontologists from collecting about 200 kg of fossil material during a late summer expedition. Here (l-r) Dr. Tamaki Sato, Dr. Xiao-chun Wu and Richard Day search for evidence of ancient marine life in sedimentary rocks along a river bed in the Pasquia Hills of east central Saskatchewan.

Martel, A., and J.B. Madill. 2005. Freshwater mussels in Gatineau Park lakes, Southwestern Quebec: monitoring for the future. EMAN Monitor, Environment Canada EMAN newsletter. January 2005.

Madill, J.B. and A. Martel. 2005. Good News about the Gatineau tadpole snail in Meech Lake, Gatineau Park, Quebec. EMAN Monitor, Environment Canada EMAN newsletter. January 2005.

Murray, A.M., K.L. Seymour and S.L. Cumbaa. 2004. Taxonomic detective work – the case of *Parasyllaemus gracilis*. *Canadian Palaeobiology*, 11:8-13.

Piilonen, P.C., T.S. Ercit and A.C. Roberts. 2005. New mineral names. *American Mineralogist*, 90: 768-773.

Poulin, M. 2004. Log Book, June 11th 2004 – Ice algae. [www page] URL http://www.cases.quebec-ocean.ulaval.ca/trip/log_jun/log_june11.asp

Poulin, M. 2004. Bottom ice algae. Characteristics of the bottom ice microalgal communities in land-fast ice and mobile ice floes. Cruise Report of Leg 7, CASES project, CCGS *Amundsen*. 5 p.

Rybczynski, N. 2004. Optimized for Chewing. *Science*, 306:2045.

Rybczynski, N. 2004. Effect of incisor shape on woodcutting performance in two beaver (Castoridae, Rodentia). *Journal of Vertebrate Paleontology*, 24(3):107A.

Rybczynski, N. 2004. Rybczynski, N. 2004. Woodcutting functional morphology in an extant and fossil beaver. *Journal of Vertebrate Morphology*, 260(3):325.

Rybczynski, N. 2004. Behavioral evolution in fossil castorids. *Integrative and Comparative Biology*, 43(6):832.

Stewart, K.M., L. Leblanc, D. Matthiesen and J. West. 2004. Analysis of vertebrate remains from an African fish eagle roost and implications for fossil microfauna. *Archaeozoologia X*, 1.2:158.

Wu, X.-C and Dong, Z.-M. 2004. A polydactylous skeleton of Hupehsuchian (Diapsida) from China. *Journal of Vertebrate Paleontology* 24, Supplement to (3):132

Reports and Confidential Documents

Pathy, D.A., **B.W. Coad** and J.D. Reist. 2004. Distribution of Marine Fishes of the Western Canadian Arctic, Including the Beaufort Sea. Report submitted to Arctic Fish Ecology and Assessment Research Section, Fisheries and Oceans Canada, Winnipeg.

Graham, M. and R. Smith. 2005. Article 7 (Taxonomy and Monitoring) of the 3rd National Report for the UNEP Convention on Biological Diversity. 10pp.

Graham, M. 2005. The Canadian Federal Position Regarding the Global Taxonomy Initiative. Prepared for the Biodiversity Convention Office, Environment Canada (for the 10th SBSTTA meeting, Bangkok).

Graham, M. 2004. Summary of Canadian Input to the Program of Work for the Global Taxonomy Initiative. Used as part of the Synthesis of Reports on the Implementation Program of Work for the Global Taxonomy Initiative, UNEP/CBD/SBSTTA/11/Inf.x, November 2004. 66pp.

Graham, M. 2004. Head of Delegation Report of the 9th Meeting of the Governing Board of the Global Biodiversity Information Facility, Wellington, New Zealand. Document of the Federal Biodiversity Information Partnership. 11pp.

Graham, M. 2004. Head of Delegation Report of the 8th Meeting of the Governing Board of the Global Biodiversity Information Facility, Oaxaca, Mexico. Document of the Federal Biodiversity Information Partnership. 14pp.

Hamilton, P.B., L.M. Ley, F.R. Pick and M. Poulin. 2004. Plankton Densities and Biomass in the Rideau River, Ottawa River, Constance Lake, Mud Lake and McKay Lake during the year 2003. Research Division, Canadian Museum of Nature. Technical Report 2004/1:1-349.

Danard, R.J. and **P.B. Hamilton.** 2004. The Control of *Myriophyllum spicatum* (Eurasian Watermilfoil) in the Rideau Canal. Report presented to Parks Canada, Rideau Canal Office, September 2004. 142pp.

Piilonen, P.C., R. Rowe, and R.A. Gault. 2005. Intern report on the mineralogy of the Larvik complex pegmatites. Presented to S. Dahlgren, Vestfold, Buskerod and Telemark Municipality Government, Norway.

Other

Bloch, J.D., K. Chin, A.R. Sweet, J.J. Eberle and **S.L. Cumbaa.** 2004. Terminal Late Cretaceous regression on the southeast margin of the Sverdrup Basin: Shale and bentonite petrology of the upper Kanguk Formation, Devon Island, Nunavut. Paper No. 198-6, Geological Society of America, *Abstracts with Programs*, 36(5):461.

Chin, K., J.D. Bloch, J.S. Tweet, J.J. Eberle, **S.L. Cumbaa** and A.R. Sweet. 2004. Benthic-pelagic coupling in the Upper Cretaceous High Arctic; Evidence from a suite of unusual polar coprolites. Paper No. 161-9, Geological Society of America, *Abstracts with Programs*, 36(5):380.

Shimada, K., **S.L. Cumbaa** and D. Van Rooyen. 2004. Caudal fin of the Late Cretaceous shark, *Cretoxyrhina mantelli* (Lamniformes: Cretoxyrhinidae). *Journal of Vertebrate Paleontology*, 24(suppl. to no.3):112A.

Danks, H.V. 2004. How similar are daily and seasonal biological clocks, Abstract from XXII International Congress of Entomology, 15-21 August 2004, Brisbane, Australia.

Graham, F. 2004. Lessons From a Fire in a Natural History Museum. Museums Strategies for Emergency Response and Salvage. Program and Abstracts of the 19th Annual Meeting for the Society for the Preservation of Natural History Collections, New York, New York, 41pp.

Grice, J.D. 2004. Classification of crystal structures in the silicate-carbonate chemical division. Mineral and Museums Conference. Paris, France. September 6-8.

Grice, J.D. 2004. Crystal structure determination of the calcium-silicate-carbonates spurrite, tilleyite and scawtite and their relationship to other species in the silicate-carbonate-chemical class. Proceedings of the Geological Association of Canada – Mineralogical Association of Canada Joint Annual Meeting, Saint-Catherines, May 12-14.

Johnsen, O., **J.D. Grice** and **R.A. Gault.** 2004. The kentbrooksite story. Goldschmidt Conference, Copenhagen, Denmark. June 6-11. Invited paper.

Murray, A.M. (Editor). 2004. *Canadian Palaeobiology*, number 11:22 p.

Piilonen, P.C., R. Rowe, J.D. Grice, R.A. Gault, M.A. Cooper, U. Kolitsch and B. Lechner. 2005: Two new sodium rare-earth fluorocarbonates from the Aris phonolite, Namibia. Rochester Mineralogical Symposium, Program with Abstracts.

Piilonen, P.C., F. Farges, R. Linnen, G.E. Brown Jr., M. Pawlak and A. Pratt. 2004: Structural environment of Nb in dry and fluid-rich (H₂O, F) silicate glasses: A combined XANES and EXAFS study, including a novel approach to ICP-AES analysis of micro-materials. Program with Abstracts, 2004 GAC-MAC Annual Meeting.

Lang, N.J., K.J. Roe, R.L. Mayden, F.C. (sic) Chapleau, H.S. Gill, I.C. Potter and **C.B. Renaud**. 2005. Molecular phylogenetics of lampreys (Agnatha: Petromyzontiformes), with a test of satellite speciation. Abstract, Symposium and 39th Annual Meeting of the American Fisheries Society California-Nevada Chapter. p. 66-67.

Lang, N.J., K.J. Roe, R.L. Mayden, F. Chapleau, H.S. Gill, I.C. Potter and **C.B. Renaud**. 2004. Molecular phylogenetics of worldwide, extant lampreys (Agnatha: Petromyzontiformes), with a test of satellite speciation. XIth European Congress of Ichthyology, Tallinn, Estonian Marine Institute Report Series #12: A02.

Thompson, J., J. Bower, E. Fisher, A. Mabulla, C. Marean, **K.M. Stewart** and C. Vondra. 2004. Loiyangalani: behavioral and taphonomic aspects of a Middle Stone Age site in the Serengeti Plain, Tanzania. *Paleoanthropology May 2004*:A56.

Waller, R. 2004. Assessing Risks to your Collection. 32nd AIC Annual Meeting. Participant manuals for training workshops.

Waller, R. 2004. Assessing Risks to the San Diego Natural History Museum's Collections. San Diego Natural History Museum. Participant manuals for training workshops.

Waller, R. 2004. Assessing and Managing Risks to the Te Papa Collections. Museum of New Zealand Te Papa Tongarewa, Wellington. Participant manuals for training workshops.

Waller, R. 2004. Assessing Risks to Collections. Royal British Columbia Museum, Victoria. Participant manuals for training workshops.

Waller, R. 2004. Assessing and Managing Risks to the Koninklijke Bibliotheek and Nationaal Archief Collections. Participant manuals for training workshops.

Waller, R. 2004. Commitment to Effective Preservation: A risk-based approach to the conservation of cultural property. The Best in Heritage 2004 Conference Program, European Heritage Association, Zagreb. Pp.16-17
Michalski, S. and **R. Waller**. 2004. A Risk and Decision Analysis Tool for Guiding Investment in Cultural Property Preservation. Risk Analysis: The Profession and the Future. Program and Abstracts of the Society for Risk Analysis 2004 Annual Meeting, Palm Springs. p.90.

Waller, R. 2004. Assessing Risks to the Collections of the Canadian Museum of Nature. Risk Analysis: The Profession and the Future. Program and Abstracts of the Society for Risk Analysis 2004 Annual Meeting, Palm Springs. p.91.

Kronthal, L., **G. Muething** and **R. Waller**. 2004. Bridge Building 101: Partnerships for Collection Risk Management. Museums Strategies for Emergency Response and Salvage. Program and Abstracts of the 19th Annual Meeting for the Society for the Preservation of Natural History Collections, New York, New York. p.22.

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Refereed Publications

Brodo, I.M. 2004. A new saxicolous *Porina* from maritime rocks of Haida Gwaii (Queen Charlotte Islands), British Columbia, Canada. *Bibliotheca Lichenologica*, 88: 43-48.

Caldwell, M.W. and C. Dal Sasso. 2004. Soft tissue preservation in a 95 million year old lizard: Form, function and aquatic adaptation. *Journal of Vertebrate Paleontology*, 24:980-984.

Caldwell, M.W. and M.S.Y Lee. 2004. Re-evaluation of the Cretaceous marine lizard *Acteosaurus crassicosatus* Calligaris, 1993. *Journal of Paleontology*, 78:617-619.

Pierce, S. and **M.W. Caldwell**. 2004. Redescription and phylogenetic position of the Adriatic (Upper Cretaceous; Cenomanian) dolichosaur, *Pontosaurus lesinensis* (Kornhuber, 1873). *Journal of Vertebrate Paleontology*, 24:376-389.

Cook, F. R., Editor. 2004. *The Canadian Field-Naturalist*, 117(3):347-522.

Cook, F. R., Editor. 2004. *The Canadian Field-Naturalist*, 117(4):523-710.

Cook, F. R., Editor. 2004. *The Canadian Field-Naturalist*, 118(1):1-158.

Roberts, A.C., P.C. Burns, **R.A. Gault**, A.J. Criddle and M.N. Feinglos. 2004. Petewilliamsite, (Ni,Co)₃₀(As₂O₇)₁₅, a new mineral from Johanngeorgenstadt, Saxony, Germany: description and crystal structure. *Mineralogical Magazine*, 68(2):231-240.

Harington, C.R., R.L.M. Ross, R.W. Mathewes, **K.M. Stewart** and O. Beattie. 2004. A Late Pleistocene Steller sea lion (*Eumetopias jubatus*) from Courtenay, British Columbia: Its death, associated biota and paleoenvironment. *Canadian Journal of Earth Sciences*, 41:1285-1297.

Shapiro, B., A.J. Drummond, A. Rambaut, M.C. Wilson, P.E. Matheus, A.V. Sher, O.G. Pybus, M.T.P. Gilbert, I. Barnes, Jo. Binladen, E. Willerslev, A.J. Hansen, G.F. Baryshnikov, J.A. Burns, S. Davydov, J.C. Driver, D.G. Froese, **C.R. Harington**, G. Keddie, P. Kosintsev, M.L. Kunz, L.D. Martin, R.O. Stephenson, J. Storer, R. Tedford, S. Zimov and A. Cooper. 2004. Rise and fall of the Beringian steppe bison. *Science*, 306:1561-1565.

Howden, A.T. 2004. Review of the genus *Pandeleiteius* (Coleoptera: Curculionidae) of northern South America and the Lesser Antilles. *The Canadian Entomologist*, 136:181-231.

Howden, H.F. and **F. Génier**. 2004. Seven new species of *Onthophagus* Latreille from Mexico and the United States (Coleoptera: Scarabaeidae: Scarabaeinae). *Faberies*, 29:53-76.

Skelley, P.E. and **H.F. Howden**. 2004. A new species of *Lomanoxia* Martinez from Costa Rica (Coleoptera: Scarabaeidae: Aphodiinae). *Insecta Mundi*, 17:185-190.

Hwang, J.-S., J.-s. Ho and **C.-t. Shih** (Eds) 2004. Contemporary Studies on Copepoda. *Zoological Studies*, 43:165-510.

Lo, W.-T., **C.-t. Shih**, J.-S. Hwang 2004. Copepod assemblages and diel vertical migration in the East China Sea, north of Taiwan. *Crustaceana*, 77:955-972.

Lo, W.-T., **C.-t. Shih** and J.-S. Hwang 2004. Diel vertical migration of the planktonic copepods at an upwelling station north of Taiwan, western North Pacific. *Journal of Plankton Research*, 26:89-97.

Hsiao, S.H., C.Y. Lee, **C.-t. Shih** and J.S. Hwang. 2004. Calanoid copepods of the Kuroshio Current east of Taiwan, with a note on the presence of *Calanus jashnovi* Hulsemann, 1994. *Zoological Studies*, 43:323-331.

Hsieh, C.H., T.S. Chiu and **C.-t. Shih**. 2004. Biological and physical evidences of interaction between the Kuroshio branch Current and China coastal current in the northern Taiwan Strait. *Zoological Studies*, 43:393-403.

Lan, Y.-C., **C.-t. Shih**, M.-A. Lee and M.-H. Chao 2004. Spring distribution of copepods in relation to water masses in the northern Taiwan Strait. *Zoological Studies*, 43:332-343.

Lo, W.-T., C.-L. Chung and **C.-t. Shih**. 2004. Seasonal distribution of copepods in the Tapong Bay, southwestern Taiwan. *Zoological Studies*, 43:464-474.

Hoffman, E.A., **F.W. Schueler** and M.S. Blouin. 2004. Effective population sizes and temporal stability of genetic structure in *Rana pipiens*, the Northern Leopard Frog. *Evolution*, 58(11):2536-2545.

Wight, W. 2004. Sapphire from Ontario, Canadian Gemmologist, 25(1), 30-32.

Non-refereed Publications

Brodo, I.M. 2004. George Albert Llano – 1910-2003. *Bryologist*, 107:388-391.

Brodo, I.M. 2003. William Louis Culberson (1929-2003). *Bryologist*, 106:365-371.

Brodo, I.M. 2003. Review of *Microchemical Methods for the Identification of Lichens* by A. Orange, P.W. James and F.J. White. *Bryologist*, 106:344-345.

Brodo, I.M. 2003. Review of *Lichenological Contributions in Honour of Jack Elix Bibliotheca Lichenologica* 78:1-444. Edited by P.M. McCarthy, G. Kantvilas and S.H.J.J. Louwhoff. 2001. *Bryologist*, 106:341-342.

Cook, F.R. 2004. Review of *Reptiles and Amphibians of Algonquin Provincial Park* by R.J. Brooks, D. Strickland and R.J. Rutter. *Canadian Field-Naturalist*, 117(3):490-491.

Cook, F.R. 2004. Review of *Herpetology in Montana: A History, Status Summary, Checklists, Dichotomous Keys, Accounts of Native, Potentially Native, and Exotic Species, and Indexed Bibliography* by B.A. Maxwell, J.K. Werner, P. Hendricks and D.L. Faith. *Canadian Field-Naturalist*, 117(3):491-492.

Cook, F.R. 2004. Review of the *Guide to the Reptiles of the Eastern Palearctic* by N.N. Szczerbak. *Canadian Field-Naturalist*, 117(3):492.

Cook, F.R. 2004. Review of *Herpetology: An Introductory Biology of Amphibians and Reptiles, Second Edition* by G.R. Zug, L.J. Vitt and J.P. Caldwell. *Canadian Field-Naturalist*, 117(3):493.

Cook, F.R. 2004. Review of *In Quest of Great Lakes Ice Age Vertebrates* by J.A. Holman. *Canadian Field-Naturalist*, 117(3):494.

Cook, F.R. 2004. Review of *Snakes of the United States and Canada* by C.H. Ernst and E.M. Ernst. *Canadian Field-Naturalist*, 117(3):495.

Cook, F.R. 2004. Review of *Farley: The Life of Farley Mowat* by J.King. *Canadian Field-Naturalist*, 117(3):509-510.

Cook, F.R. 2004. Review of *Amphibian Decline: An Integrated Analysis of Multiple Stressor Effects*, edited by G. Linder, S.K. Krest, D.W. Sparling. *Canadian Field-Naturalist*, 118(1):138.

Cook, F.R. 2004. Review of *Lizards: Windows to the Evolution of Diversity* by E.R. Pianka and L.J. Vitt. *Canadian Field-Naturalist* 118(1):141-142.



Photo: Giselle Bouchard

Museum research assistant Paul Hamilton holds a core sample of soil collected on Victoria Island in the High Arctic in 2000, assisted by student Michelle Leblanc. Analysis of the thousands of diatoms in the sample opens a window onto past environmental conditions, in this case about 500 years.

Wight, Q. and **W. Wight**. 2005. The 29th IGC Conference, Wuhan, China, *Canadian Gemmologist*, 26(1):13-21.

Schueler, F.W. 2004. Seasonal and diurnal patterns of calling in Canadian Anurans: compiling the conventional wisdom as a null hypothesis. *The Boreal Dipnet*, 8(2/1):6-7.

Reports and Confidential Documents

Schueler, F.W. 2005. Certification of Limerick Forest. report to Limerick Forest Advisory Committee, assembled from material from Scott Davis, Ed Reynolds, Stew Hamill, the minutes of LFAC meetings, and the Web sites of referenced organizations). 2pp.

Other

Caldwell, M.W. and A. Keswani. 2004. Laminated marine carbonates and fossil lagerstatts. Abstracts of Papers, 63rd Annual Meeting, *Journal of Vertebrate Paleontology*, Vol. 24, Supp. to No. 3:43A

Tissandier, S., and **M.W. Caldwell**. 2004. Comparative morphology and intracolumnar variation in *Palaeophis colosseus*. Abstracts of Papers, 63rd Annual Meeting, *Journal of Vertebrate Paleontology*, Vol. 24, Supp. to No. 3:121A

Maxwell, E.E., and **M.W. Caldwell**. 2004. A platypterygiid ichthyosaur from the Lower Cretaceous of Western Canada. Abstracts of Papers, 63rd Annual Meeting, *Journal of Vertebrate Paleontology*, Vol. 24, Supp. to No. 3:91A

Schueler, F.W. 2004. Non-Fibre Values: biodiversity column in S&W Report, *The Ontario Woodlot Association Newsletter*.

Schueler, F.W. 2004. Non-Fibre Values: Red Skies, White Hares, and Blue Pee – Long May They Wave. S&W Report 34:8-9.

Schueler, F.W. 2004. Non-Fibre Values: trapping nutrients in an ephemeral root-web. S&W Report 35:15-16.

Schueler, F.W. 2004. Non-Fibre Values: A dog-strangling tangle. S&W Report 36:7-8.

Schueler, F.W. 2004. Non-Fibre Values: Tamarack tangled up in hyphae. S&W Report 37:18-19.

Schueler, F.W. 2005. Non-Fibre Values: Weaving the old-growth fabric. S&W Report 38:14-15.

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Photo: Martin Lipman



Gifts have been made in memory of the following individuals:

Jordan Livingston (*Natural Partnerships Campaign*)

Jerry Van Velthuizen (*Collections*)

Donations in memory of Jerry Van Velthuizen were used by the Museum to acquire this recently collected, whitlockite specimen from the Big Fish River area of northern Yukon. The specimen is unique for the size of its crystals, up to 1.5 cm. Previous finds never showed crystals bigger than a few mm. across. As a staff member of the Museum, Jerry devoted his life to the collection of rare minerals and made several trips to Big Fish River and nearby Rapid Creek, well-known as phosphate localities.

Charles and Marcelle Weber (*Collections*)

Marcelle H. Weber (*Collections*)

Donations in memory of Marcelle and Charles Weber were used by the Museum to acquire three unique, recently-collected specimens – a large cluster of elpidite crystals and two epididymite twinned crystals that were among the largest ever found at the site of Mont Saint-Hilaire, to which the couple made 240 trips from their home in Connecticut over a period of three decades to collect specimens. Their dedication and great knowledge of the Saint-Hilaire minerals helped discover many new species, among them the charmarite-2H, named from their combined first names.

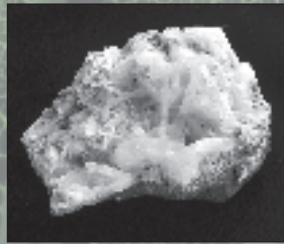


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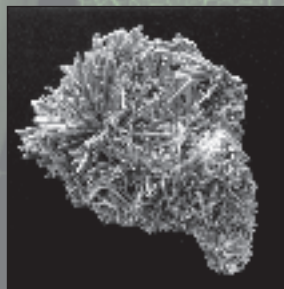


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International Society for Diatom Research, London, United Kingdom

IUCN – The World Conservation Union, Gland, Switzerland

Laboratoire Arago, Banyuls-sur-mer, France

Liberty Science Centre, Jersey City, New Jersey

Moss Landing Marine Laboratories, Moss Landing, California

Murdoch University, Perth, Australia

Museo de Historia Natural de la Ciudad de Mexico, Mexico City, Mexico

Museo de La Plata, La Plata, Argentina

Museo Nacional de Historia Natural, Santiago, Chile

Muséum d'histoire naturelle de Lyon, Lyon, France

Muséum d'histoire naturelle de Neuchâtel, Neuchâtel, Switzerland

Museum für Naturkunde der Humboldt-Universität, Berlin, Germany

Muséum national d'histoire naturelle, Paris, France

Nationaal natuurhistorisch Museum naturalis, Leiden, Netherlands

National Museum of Kenya, Nairobi, Kenya

National Museum of Natural Science, Taiwan, Republic of China

National Science Foundation, Washington, DC

National Science Museum, Tokyo, Japan

National Water Research Institute, Burlington, Ontario

The Natural History Museum, London, United Kingdom

Natural History Museum of Los Angeles County, Los Angeles, California

Natural History Museums and Botanical Garden, University of Oslo, Oslo, Norway

Nausicaä, Centre National de la Mer, Boulogne-sur-Mer Cedex, France

New York University, New York, New York

Northwest University, Xi-an, The People's Republic of China

PanArctic Flora Project, Oslo, Norway

Pontificia Universidad Católica del Ecuador, Quito, Ecuador

Research Institute for Bioresources of Okayama University, Kurashiki, Japan

Rockefeller Wildlife Refuge, Dept of Wildlife & Fisheries, Grand Chenier, Louisiana

Royal Botanic Garden Herbarium, Kew, London, United Kingdom

Rutgers University, New Brunswick, New Jersey

S. Sharnoff, Berkeley, California

San Diego Natural History Museum, San Diego, California

Science Museum of Minnesota, Saint-Paul, Minnesota

Scripps Institution of Oceanography, San Diego, California

Senckenberg Research Institute and Natural History Museum, Frankfurt, Germany
Singapore Science Centre, Singapore, Singapore
Smithsonian Institute, Washington, DC
Society for the Preservation of Natural History Collections, Washington, DC
Southampton Oceanography Centre, Southampton, United Kingdom
St. Lawrence University, Canton, New York
Stanford University, Stanford, California
State University of New York, Stony Brook, New York
United Nations Association in Canada, Ottawa, Ontario
Universität Hamburg, Zoologisches Institut und Museum, Hamburg, Germany
Université de Marne la Vallée, Marne-la-Vallée Cedex 2, France
Université de Nantes, Nantes, France
University of Alabama, Tuscaloosa, Alabama
University of Alaska, Fairbanks, Alaska
University of Barcelona, Barcelona, Spain
University of California, Los Angeles, California
University of Copenhagen, Copenhagen, Denmark
University of Kansas, Lawrence, Kansas
University of Lisbon, Lisbon, Portugal
University of Michigan, Ann Arbor, Michigan
University of Nebraska State Museum, Lincoln, Nebraska
University of North Carolina, Durham, North Carolina
University of Oslo, Oslo, Norway
University of Plymouth, Plymouth, United Kingdom
Utah Valley State College, Orem, Utah
Western Washington University, Bellingham, Washington
Wetlands International, Wageningen, Netherlands
World Wildlife Fund, Washington, DC
Yale University Press, New Haven, Connecticut
Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
Zoological Museum, Copenhagen, Denmark

National

ADCOM Videoconferencing, Ottawa, Ontario
Agriculture and Agri-Food Canada, Ottawa, Ontario; Saskatoon, Saskatchewan; St. Jean-sur-Richelieu, Quebec; Winnipeg, Manitoba
Alberta Science Centre, Calgary, Alberta
Alliance of Natural History Museums of Canada, Drumheller, Alberta
Alpine Gems, Kingston, Ontario
Arctic Net, Quebec, Quebec
Art Gallery of Ontario, Toronto, Ontario
Association québécoise pour la promotion de l'éducation relative à l'environnement, Montreal, Quebec
Biodiversity Convention Office (Environment Canada), Ottawa, Ontario
Biodôme, Montreal, Quebec
Biosphère, Montreal, Quebec
Bird Studies Canada, Port Rowan, Ontario
British High Commission, Ottawa, Ontario

Brockville Museum, Brockville, Ontario
Canada Agriculture Museum, Ottawa, Ontario
Canada and the World Pavilion, Ottawa, Ontario
Canada Aviation Museum, Ottawa, Ontario
Canada Centre for Remote Sensing, Ottawa, Ontario
Canada Marine Discovery Centre, Hamilton, Ontario
Canada Science and Technology Museum, Ottawa, Ontario
Canada's Digital Collections, Ottawa, Ontario
Canada's SchoolNet, Ottawa, Ontario
Canadian Association for Conservation, Ottawa, Ontario
Canadian Association of Principals, Ottawa, Ontario
Canadian Association of Professional Conservators, Ottawa, Ontario
Canadian Association of Science Centres, Sudbury, Ontario
Canadian Biodiversity Institute, Ottawa, Ontario
Canadian Blood Services, Ottawa, Ontario
Canadian Botanical Association, Guelph, Ontario
Canadian Botanical Conservation Network, Burlington, Ontario
The Canadian College of Teachers, Ottawa, Ontario
Canadian Committee for IUCN, Ottawa, Ontario
Canadian Conservation Institute, Ottawa, Ontario
Canadian Forest Services, Natural Resources Canada, Edmonton, Alberta & Fredericton, New Brunswick
Canadian Heritage, Ottawa, Ontario
Canadian Medical Hall of Fame, London, Ontario
Canadian Museums Association, Ottawa, Ontario
Canadian Museum of Civilization, Gatineau, Quebec
Canadian Museum of Contemporary Photography, Ottawa, Ontario
Canadian Nature Federation, Ottawa, Ontario
Canadian Network for Environmental Education and Communication (EECOM), Emerald, Prince Edward Island
Canadian Parks and Wilderness Society, Ottawa, Ontario
Canadian Parks Partnership, Revelstoke, British Columbia
Canadian Post-Secondary Student Leadership Conference, Kingston, Ontario
Canadian Rivers Institute, Fredericton, New Brunswick
Canadian Rivers Management Society, Ottawa, Ontario
Canadian Society of Zoologists, Ottawa, Ontario
Canadian Space Agency, Longueuil, Quebec
Canadian War Museum, Ottawa, Ontario
Canadian Wildlife Federation, Ottawa, Ontario
Carleton University, Ottawa, Ontario
Centre de recherche sur le vieillissement (Université de Sherbrooke), Sherbrooke, Quebec

Centre for Marine Biodiversity
Bedford Institute of Oceanography, Dartmouth, Nova Scotia
Centre for Rural Studies and Enrichment, Muenster, Saskatchewan
The Centre for Traditional Knowledge, Gatineau, Quebec
Citizenship and Immigration Canada, Ottawa, Ontario
Coastal Artic Shelf Exchange Study (CASES), Quebec, Quebec
Comité de Valorisation de la Rivière Beauport, Quebec, Quebec
Committee on the Status of Endangered Wildlife in Canada (COSEWIC), Ottawa, Ontario
Currency Museum of the Bank of Canada, Ottawa, Ontario
Dalhousie University, Halifax, Nova Scotia
Earth Rangers, Woodbridge, Ontario
Ecological Monitoring and Assessment Network (EMAN), Burlington, Ontario
Encounters with Canada, Ottawa, Ontario
Entomological Society of Canada, Ottawa, Ontario
Environment Canada, Gatineau, Quebec
Expatriate Resources and Archer-Cathro Ltd., Whitehorse, Yukon Territory
Fisheries and Oceans Canada, Ottawa, Ontario, Winnipeg, Manitoba and Mont-Joli, Quebec
Fisherman's Cove Development Association, Eastern Passage, Nova Scotia
Foreign Affairs and International Trade, Ottawa, Ontario
Geological Survey of Canada, Ottawa, Ontario
Geological Survey of Canada, Natural Resources Canada, Ottawa, Ontario
Girl Guides of Canada, Ottawa, Ontario
Government of Nunavut, Iqaluit, Nunavut
Government of Yukon, Heritage Branch, Whitehorse, Yukon Territory
Grasslands National Park of Canada, Val Marie, Saskatchewan
Grimsby Museum, Grimsby, Ontario
HMCS Haida National Historic Site of Canada, Hamilton, Ontario
Human Resources Development Canada, Ottawa, Ontario
Industry Canada, Ottawa, Ontario
Insectarium de Montréal, Montreal, Quebec
Institut de l'énergie et de l'environnement, Quebec, Quebec
Institute on Governance, Ottawa, Ontario
Institut québécois de la biodiversité, Montreal, Quebec
International Development Research Centre, Ottawa, Ontario
Jardin Botanique de Montréal, Montreal, Quebec
Kerry Wood Nature Centre, Red Deer, Alberta
Kortright Centre for Conservation, Woodbridge, Ontario
Laboratoire d'Océanographie Biologique Laurentian University, Sudbury, Ontario
Learning for a Sustainable Future, North York, Ontario
Lester B. Pearson College, Victoria, British Columbia
Manitoba Museum, Winnipeg, Manitoba
McGill University, Montreal, Quebec

Memorial University of Newfoundland, St. John's, Newfoundland & Labrador
Ministère de l'agriculture des pêcheries et de l'alimentation du Québec, Québec, Québec
Montréal Science Centre, Montreal, Québec
Morden and District Museum, Morden, Manitoba
Morningstar Enterprises Inc., Kelowna, British Columbia
Musée de la civilisation, Québec, Québec
Musée Heritage Museum, St. Albert, Alberta
Museum Assistance Program (MAP), Canadian Heritage, Gatineau, Québec
National Archives and Library, Ottawa, Ontario
National Arts Centre, Ottawa, Ontario
National Film Board, Ottawa, Ontario
National Gallery of Canada, Ottawa, Ontario
National Research Council, Ottawa, Ontario
Natural Resources Canada, Ottawa, Ontario
NatureServe Canada, Ottawa, Ontario
New Brunswick Museum, St. John, New Brunswick
Newfoundland Science Centre, St. John's, Newfoundland
Northern Life Museum, Fort Smith, Northwest Territories
Nova Scotia Museum of Natural History, Halifax, Nova Scotia
Nunavut Research Institute, Iqaluit, Nunavut
Odysium, Edmonton, Alberta
Okanagan Science Centre, Vernon, British Columbia
Ontario Federation of Agriculture, Toronto, Ontario
Ontario Ministry of Natural Resources, Ottawa, Ontario
Ontario Ministry of the Environment, Ottawa, Ontario
Ontario Soil and Crop Improvement Association (Environmental Farm Plans), Guelph, Ontario
Ontario Science Centre, Toronto, Ontario
Parks Canada Agency, Gatineau, Québec
Pasquia Regional Park, Arborfield, Saskatchewan
Passionate Vision, Toronto, Ontario
Pearson College, Victoria, British Columbia
Pinegrove Productions, Lanark, Ontario
Plastichange International Inc., Drummondville, Québec
Power Plant, Regina, Saskatchewan
Prince of Wales Northern Heritage Centre, Yellowknife, Northwest Territories
Provincial Museum of Alberta, Edmonton, Alberta
Provincial Museum of Newfoundland and Labrador, St. John's, Newfoundland and Labrador
Public Works and Government Service, Ottawa, Ontario
Queen's University, Kingston, Ontario
Radio – Canada (Découverte), Ottawa, Ontario
Red Deer & District Museum, Red Deer, Alberta
Redpath Museum, McGill University, Montreal, Québec
Regional District of Central Okanagan Museum, Kelowna, British Columbia
Royal Botanical Gardens, Burlington, Ontario
Royal British Columbia Museum, Victoria, British Columbia

Royal Canadian Geographical Society, Ottawa, Ontario
Royal Canadian Mint, Ottawa, Ontario
Royal Ontario Museum, Toronto, Ontario
Royal Saskatchewan Museum, Regina, Saskatchewan
Royal Tyrrell Museum of Palaeontology, Drumheller, Alberta
Saskatchewan Environment and Resource Management, Regina, Saskatchewan
Saskatchewan Watershed Authority, Regina, Saskatchewan
Scouts Canada, Ottawa, Ontario
Science North, Sudbury, Ontario
Science World, Vancouver, British Columbia
Simon Fraser University, Burnaby, British Columbia
Sir Sanford Fleming College, Peterborough, Ontario
Société de la faune et des parcs du Québec, Québec, Québec
Société pour la promotion de la science et de la technologie, Montreal, Québec
Students on Ice, Ottawa, Ontario
TD Friends of the Environment Foundation, Toronto, Ontario
Teck Corporation, Vancouver, British Columbia
Thompson Rivers University, Kamloops, British Columbia
Tourism Yukon, Whitehorse, Yukon Territory
Treasury Board of Canada Secretariat, Ottawa, Ontario
Trent University, Peterborough, Ontario
Tropical Conservancy of Canada, Ottawa, Ontario
Université du Québec à Montréal, Montreal, Québec
Université du Québec à Rimouski, Rimouski, Québec
Université du Québec en Outaouais, Gatineau, Québec
Université Laval, Québec, Québec
University College of Cape Breton, Sydney, Nova Scotia
University of Alberta, Edmonton, Alberta
University of British Columbia, Vancouver, British Columbia
University of Calgary, Calgary, Alberta
University of Guelph, Guelph, Ontario
University of Manitoba, Winnipeg, Manitoba
University of Moncton, Edmundston, New Brunswick
University of New Brunswick, Fredericton, New Brunswick
University of Ottawa, Ottawa, Ontario
University of Prince Edward Island, Charlottetown, Prince Edward Island
University of Regina, Regina, Saskatchewan
University of Saskatchewan, Saskatoon, Saskatchewan
University of Toronto, Toronto, Ontario
University of Victoria, Victoria, British Columbia
University of Waterloo, Waterloo, Ontario
University of Windsor, Windsor, Ontario
Wildlife Habitat Canada, Ottawa, Ontario
Wings of Paradise, Cambridge, Ontario
Yukon Beringia Interpretive Centre, Whitehorse, Yukon

Regional

Algonquin College, Ottawa, Ontario
Arts Kids, Ottawa, Ontario
Ashbury College, Ottawa, Ontario
Backyard Sanctuary Concept, Ottawa, Ontario
Brookfield High School, Ottawa, Ontario
Cité étudiante Haute-Gatineau, Maniwaki, Québec
City of Gatineau, Gatineau, Québec
City of Ottawa, Ottawa, Ontario
Collège St-Joseph, Gatineau, Québec
Conseil du loisir scientifique de l'Outaouais, Gatineau, Québec
Cumberland Heritage Village Museum, Ottawa, Ontario
Dows Lake Marina, Ottawa, Ontario
E.L. Bousfield, Ottawa, Ontario
Earth Day Ottawa-Carleton, Ottawa, Ontario
Eastern Ontario Biodiversity Museum, Kemptville, Ontario
Eastern Ontario Model Forest, Kemptville, Ontario
École secondaire Grande-Rivière, Gatineau, Québec
École secondaire Hormisdas-Gamelin, Gatineau, Québec
Écomusée de Hull, Gatineau, Québec
Ikebana International, Ottawa Centennial Chapter 120, Ottawa, Ontario
J.S. Tener, Ottawa, Ontario
Laurier House, Ottawa, Ontario
Lisgar Collegiate Institute, Ottawa, Ontario
Little Ray's Reptile Zoo, Ottawa, Ontario
M.O.M. Printing, Ottawa, Ontario
Merrickville-Wolford Environmental Advisory Committee, Merrickville, Ontario
Mississippi Valley Conservation Authority, Lanark, Ontario
Mountain Equipment CO-OP, Ottawa, Ontario
Mutchmore Public School, Ottawa, Ontario
National Capital Commission/Commission de la capitale nationale, Ottawa, Ontario & Gatineau, Québec
Ottawa Botanical Garden Society, Ottawa, Ontario
Ottawa Field Naturalists' Club, Ottawa, Ontario
Ottawa Health Institute, Ottawa, Ontario
Ottawa International Writers Festival, Ottawa, Ontario
Ottawa Regional Science Fair, Ottawa, Ontario
Ottawa School of Dance, Ottawa, Ontario
Parc Museal de Gatineau, Gatineau, Québec
Parliament Hill, Ottawa, Ontario
Prématernelle d'Aylmer, Gatineau, Québec
RESCITECH (Réseau des enseignants en science et technologie), Gatineau, Québec
Rideau Valley Conservation Authority, Manotick, Ontario
Riverside Park Community and Recreation Association, Ottawa, Ontario
Robert E. Lee, Ottawa, Ontario
Rogers Television, Ottawa, Ontario
St. Clement School, Ottawa, Ontario
YMCA-YWCA, Ottawa, Ontario

Managing the Museum's Financial Resources

Photo / Illustration: PKG Joint Venture Architects



Financial Analysis

The following provides an analysis of the 2004-05 financial results of the Museum in comparison to previous years.

Comparison of Financial Results

(in thousands of dollars)

	2005	Restated 2004	Restated 2003	Restated 2002	Restated 2001
Revenue					
Parliamentary appropriation	27,188	27,154	25,169	23,024	23,393
Generated revenue	2,589	3,615	3,330	2,600	2,359
Total revenue	29,777	30,769	28,499	25,624	25,752
Expenses					
Personnel costs	14,399	14,171	13,646	12,737	10,553
Interest on capital lease obligation	3,259	3,281	3,302	3,337	3,369
Depreciation of capital assets	1,712	1,707	1,693	1,483	1,489
Operating expenses	10,711	11,875	11,924	10,525	10,439
Total operating expenses	30,081	31,034	30,565	28,082	25,850
Deficiency of Revenue over Expenses	(304)	(265)	(2,066)	(2,458)	(98)
Equity of Canada, beginning of year	(4,987)	(4,794)	(2,728)	(270)	(172)*
Contributed surplus	–	72*	–	–	–
Equity of Canada, end of year	(5,291)	(4,987)	(4,794)	(2,728)	(270)

* The Equity of Canada, beginning of year has been adjusted due to a change in accounting policy.

The Museum's parliamentary appropriation recognized as revenue in the Statement of Operations and Equity of Canada has remained very stable in 2005 over the previous fiscal year.

Generated revenue for fiscal year 2005 was \$2.6 million, 28 percent lower than the previous fiscal year due mainly to renovations at the Victoria Memorial Museum Building which reduce the services available to the public and therefore reduce attendance, rentals and parking. Another explanation of the variance in generated revenue is that important sponsorships have ended in the previous fiscal year for *The Gee! in Genome* and *Sila: Clue in to Climate Change* Projects. However increased interest income has helped minimize the overall reduction of generated revenue by almost doubling from the previous year level.

Personnel costs of \$14.4 million are the single most significant expense of the Corporation, representing 48 percent of total revenue. Personnel costs have increased by 1.6 percent from 2004 due to normal wage increases which was offset by a rigorous review of all staffing requirements to minimize spending.

Operating expenses totaling \$10.7 million have decreased from the previous year by 9.8 percent as a result of less spending in professional services and publicity and promotion due to the completion of *The Gee! in Genome* and the *Sila: Clue in to Climate Change* Projects.

At the request of Treasury Board, the Museum has recorded in its books the Victoria Memorial Museum Building and land under its control. Both were recorded at their historical cost of \$5,312,000 and \$72,000 respectively and this change was done retroactively. Because the building is fully depreciated it did not have any effect on the financial statements, however the land has increased both the capital assets and the Equity of Canada by \$72,000.

As a result of the revenue and expenses mentioned above, the Museum reports a deficiency of revenue over expenses of \$304,000 for fiscal year 2005.

The Museum anticipates consecutive years of deficiencies of revenue over expenses because of depreciation charges for its facility in Gatineau, Quebec, which is shown on the Museum's balance sheet as a capital lease. Prior to acquiring this building in 1997, the Museum only leased facilities, and therefore did not report on its Statement of Operations depreciation charges relating to a building. These lease dollars were converted in 1997 to payments on the capital lease for the facility thus creating an imbalance on the Statement of Operations. This accounting treatment will keep the Corporation's Equity in a deficit position for many years. The situation will begin to reverse near the mid-point of the lease term and completely rectify itself over the full term of the lease. This does not impact the Corporation's cash flow or financial stability in any way.

The Museum faces a major challenge with the high cost of carrying and operating its two facilities. The Museum is exploring options with the Government of Canada to mitigate these costs.

Financial Statements

Management's responsibility for financial reporting

Management is responsible for establishing and maintaining a system of books, records, internal controls and management practices to provide reasonable assurance that: reliable financial information is produced; the assets of the Corporation are safeguarded and controlled; the transactions of the Corporation are in accordance with the relevant legislation, regulations and by-laws of the Corporation; the resources of the Corporation are managed efficiently and economically; and the operations of the Corporation are carried out effectively.

Management is also responsible for the integrity and objectivity of the financial statements of the Corporation. The accompanying financial statements were prepared in accordance with Canadian generally accepted accounting principles. These principles have been applied, except for the change in the method of accounting for the land and building occupied by the Corporation, on a basis consistent with that of the preceding year. The financial information contained elsewhere in this annual report is consistent with that in the financial statements.

The Board of Trustees is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control. The Board exercises its responsibilities through the Audit and Finance Committee, which includes a majority of members who are not officers of the Corporation. The Committee meets from time to time with management, the Corporation's internal auditors and the Office of the Auditor General of Canada to review the manner in which these groups are performing their responsibilities, and to discuss auditing, internal controls, and other relevant financial matters. The Board of Trustees has reviewed the financial statements with the Office of the Auditor General of Canada and has approved them.

The financial statements have been audited by the Auditor General of Canada. Her report offers an independent opinion on the financial statements to the Minister of Canadian Heritage.



Joanne DiCosimo
President and Chief Executive Officer



Maureen Dougan
*Vice President, Corporate Services
and Chief Operating Officer*

June 3, 2005

Auditor's report

To the Minister of Canadian Heritage

I have audited the balance sheet of the Canadian Museum of Nature as at March 31, 2005 and the statements of operations and equity of Canada and cash flows for the year then ended. These financial statements are the responsibility of the Corporation's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2005 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles. As required by the *Financial Administration Act*, I report that, in my opinion, these principles have been applied, after giving retroactive effect to the change in the method of accounting for the land and building under the control of the Corporation as explained in Note 3 to the Financial statements, on a basis consistent with that of the preceding year.

Further, in my opinion, the transactions of the Corporation that have come to my notice during my audit of the financial statements have, in all significant respects, been in accordance with Part X of the *Financial Administration Act* and regulations, the *Museums Act* and the by-laws of the Corporation.



Lyse Ricard, CA
Assistant Auditor General for the Auditor General of Canada

Ottawa, Canada
June 3, 2005

Balance Sheet as at March 31, 2005

(in thousands of dollars)

	Notes	2005	2004 Restated (Note 3)
Assets			
Current			
Cash and short-term investments	4	40,195	15,890
Accounts receivable			
Trade		333	459
Government departments and agencies	15	1,203	4,488
Prepaid expenses		426	732
		42,157	21,569
Restricted cash, short-term investments and receivables	5	1,527	1,176
Collections	6	1	1
Capital assets	7	66,520	46,454
		110,205	69,200
Liabilities			
Current			
Accounts payable and accrued liabilities			
Trade		2,852	2,761
Government departments and agencies	15	13,488	7,094
Current portion – obligation under capital lease	8	267	241
Deferred revenue and parliamentary appropriation		23,357	10,202
Employee future benefits	9	263	185
		40,227	20,483
Obligation under capital lease	8	32,415	32,683
Deferred capital funding	10	39,521	18,287
Employee future benefits	9	1,828	1,624
Deferred contributions	11	1,200	825
		115,191	73,902
Commitments and Contingencies	16, 17		
Endowment	12	305	285
Equity of Canada		(5,291)	(4,987)
		110,205	69,200


The accompanying notes form an integral part of the financial statements.

Approved by the Board of Trustees:

Recommended by Management:



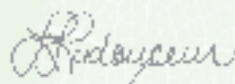
R. Kenneth Armstrong
Chairman of the Board of Trustees



Maureen Dougan
Vice President, Corporate Services and Chief Operating Officer



Johanne Bouchard
Chairman of the Audit and Finance Committee



Lynne Ladouceur, CA
Senior Full Time Financial Officer

Statement of Operations and Equity of Canada for the year ended March 31, 2005

(in thousands of dollars)

	Notes	2005	2004 Restated (Note 3)
Revenue			
Commercial operations	13	610	1,261
Contributions		653	1,554
Interest income		813	411
Educational programmes		256	208
Scientific services		36	79
Other		221	102
		2,589	3,615
Expenses			
Personnel costs		14,399	14,171
Interest on capital lease obligation		3,259	3,281
Operation and maintenance of buildings		2,728	2,762
Professional and special services		2,258	2,794
Depreciation of capital assets		1,712	1,707
Real property leases and taxes		1,586	1,608
Exhibitions		1,245	1,188
Information management infrastructure and systems		1,258	1,288
Marketing and communications		407	900
Repairs and maintenance		576	660
Travel		528	491
Freight and cartage		79	119
Purchase of objects for collections		37	5
Other		9	60
		30,081	31,034
Net result of operations before government funding		(27,492)	(27,419)
Parliamentary appropriation	14	27,188	27,154
Net result of operations		(304)	(265)
Equity of Canada, beginning of year		(4,987)	(4,794)
Contributed surplus		–	72
Equity of Canada, end of year		(5,291)	(4,987)

The accompanying notes form an integral part of the financial statements.

Statement of Cash Flows for the year ended March 31, 2005

(in thousands of dollars)

	2005	2004 Restated (Note 3)
Operating activities		
Cash receipts – customers	2,796	3,785
Cash receipts – parliamentary appropriation	43,231	31,809
Cash disbursements – suppliers and employees	(18,984)	(22,429)
Interest received	821	416
Interest paid	(2,986)	(3,280)
	24,878	10,301
Financing activities		
Appropriation used to purchase depreciable capital assets	21,778	8,975
Obligation under capital lease	(242)	(219)
Endowment increase	20	–
	21,556	8,756
Investing activities		
Acquisition of capital assets	(21,778)	(8,978)
Increase in restricted cash, short-term investments and receivables	(351)	(162)
	(22,129)	(9,140)
Increase in cash and short-term investments	24,305	9,917
Cash and short-term investments, beginning of year	15,890	5,973
Cash and short-term investments, end of year	40,195	15,890

The accompanying notes form an integral part of the financial statements.

Notes to Financial Statements for the year ended March 31, 2005

1. Authority and mission

The Canadian Museum of Nature was established by the *Museums Act* on July 1st, 1990, and is an agent Crown corporation named in Part I of Schedule III to the *Financial Administration Act*.

The Corporation's mission is to increase, throughout Canada and internationally, interest in, knowledge of and appreciation and respect for the natural world by establishing, maintaining and developing for research and posterity a collection of natural history objects, with special but not exclusive reference to Canada, and by demonstrating the natural world, the knowledge derived from it and the understanding it represents.

2. Significant accounting policies

A) Basis of Accounting

The financial statements are prepared in accordance with Canadian generally accepted accounting principles and reflect the following policies.

B) Use of Estimates

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of income and expenses for the year. Employee-related liabilities, land, building and estimated useful lives of capital assets are the most significant items where estimates are used. Actual results could differ from those estimated.

C) Cash and Short-term Investments

Cash and short-term investments consist of balances with banks and investments in money market instruments with terms to maturity of 12 months or less. These investments are carried at cost, which approximates fair value as they are intended to be held to maturity. Interest income is recorded on an accrual basis.

D) Collections

The Canadian Museum of Nature holds and preserves invaluable collections of natural history specimens for the benefit of Canadians, present and future. The collections form the largest part of the assets of the Corporation. The collections are shown as an asset on the balance sheet at a nominal value of \$1,000 due to practical difficulties in determining a meaningful value for these assets. Objects purchased for the collections are recorded as an expense in the year of acquisition. Objects donated to the Corporation are not recorded in the books of accounts.

E) Capital Assets

Capital assets are recorded at cost. Assets recorded as capital leases are initially recorded at the present value of the minimum lease payments at the inception of the lease. Land and building owned by the Government of Canada and that are under the control of the Corporation are recorded at their estimated cost. Depreciation is calculated on the straight-line method using rates based on the estimated useful life of the assets as follows:

Building	Property under capital lease	Collection cabinets and compactors	Research equipment	Technical equipment	Furnishings and office equipment	Building improvements	Motor vehicles	Leasehold improvements	Computer equipment and software
40 years	35 years	35 years	10 years	10 years	10 years	5 to 25 years	5 years	3 to 5 years	3 years

Amounts included in renovation work in progress are transferred to the appropriate capital asset classification upon completion, and are then depreciated according to the Corporation's policy.

Material and equipment acquired for the purpose of the design, development and maintenance of exhibits are charged to operations in the year of acquisition.

F) Employee Future Benefits

i) Pension benefits

Employees participate in the Public Service Pension Plan administered by the Government of Canada. The Corporation's contribution to the plan reflects the full cost of the employer contributions. This amount is currently based on multiple of the employee's required contributions, and may change over time depending on the experience of the Plan. These contributions represent the total pension obligations of the Corporation and are charged to operations on a current basis. The Corporation is not currently required to make contributions with respect to actuarial deficiencies of the Public Service Pension Plan.

ii) Severance benefits

Employees are entitled to severance benefits, as provided for under labor contracts and conditions of employment. The cost of these benefits is accrued as the employees render the services necessary to earn them. Management determined the accrued benefit obligation using a method based upon assumptions and its best estimates. These benefits represent the only obligation of the Corporation that entails settlement by future payment.

G) Parliamentary Appropriation

The parliamentary appropriation for operating expenditures is recognized as revenue in the fiscal year for which it is approved. The portion of the parliamentary appropriation used to purchase depreciable capital assets is recorded as deferred capital funding and amortized on the same basis and over the same period as the related capital assets. Parliamentary appropriations for specific projects are deferred and recognized on the Statement of Operations and Equity of Canada in the year in which the related expenses are incurred.

H) Contributions

The Corporation follows the deferral method of accounting for contributions.

Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured. Contributions externally restricted are deferred and recognized as revenue in the year in which the related expenses are recognized. Restricted investment income is recognized as revenue in the year in which the related expenses are incurred.

Contributions received in a form other than cash are recorded at their fair value at the date they are received by the Corporation.

Volunteers contribute a significant number of hours per year. Because of the difficulty of determining their fair value, contributed services are not recognized in the financial statements.

I) Endowment

The endowment consists of restricted donations received by the Corporation. The endowment principal is required to be maintained intact. The investment income generated from the endowment is treated as a deferred contribution and must be used in accordance with the purpose established by the donors. Endowments received do not flow through the Statement of Operations and Equity of Canada but rather are credited to endowments directly.

3. Change in accounting policy

During the year, the Corporation changed its accounting policy related to capital assets. At the request of Treasury Board, the Corporation recorded the land and the Victoria Memorial Museum Building owned by the Government of Canada that are under the control of the Corporation. The land is recorded at its estimated historical cost. This change increased both the capital assets and the contributed surplus by \$72,000, with no impact on net result. The Victoria Memorial Museum Building is recorded at its estimated historical cost of \$5,312,000. The building was completely depreciated therefore its inclusion in the books had no impact on the financial statements. This change in accounting policy was applied retroactively. Consequently, the financial statements for the year ended March 31, 2004 were restated as follows:

(in thousand of dollars)

	2004 Restated	2004 as previously stated
Balance Sheet:		
Capital Assets	46,454	46,382
Equity of Canada	(4,987)	(5,059)
Notes to Financial Statements:		
Land – net book value (note 7)	627	555

4. Cash and short-term investments

(in thousand of dollars)

	2005	2004
Cash	1,089	5,056
Short-term investments	39,106	10,834
	40,195	15,890

The Corporation invests operating funds in the short-term money market instruments that are rated AA or better and guaranteed by the Government of Canada, a provincial government or the Royal Bank of Canada. The investment vehicles consist primarily of banker's acceptance, promissory notes and term deposits. The overall portfolio yield as at March 31, 2005 was 2.53% (2004 – 2.31%) and the average term to maturity is 35 days (2004 – 66 days). The fair value of the investment portfolio at year-end approximates the book value due to their short term nature.

5. Restricted cash, short-term investments and receivables

Restricted cash, short-term investments and receivables include deferred contributions, funds received for the Endowment and amounts receivable that can be reasonably estimated and for which collection is reasonably assured. Restricted cash accounts are managed in accordance with the donor's wishes and are invested in accordance with investment policies of the Corporation.

The Corporation invests restricted funds in short-term money market instruments rated AA or better and guaranteed by the Government of Canada, a provincial government or the Royal Bank of Canada. The investment vehicles consist primarily of banker's acceptance, promissory notes and term deposits. The fair value of the investment portfolio at year-end approximates the book value due to their short term nature.

6. Collections

The natural history collections consist of over 10 million specimens and grew by 35,042 items this fiscal year (2004 – 29,366). They are an exceptional scientific resource that is available nationally and internationally for research, exhibits and education.

The collections are divided into four discipline related groups, being:

- ▶ the Earth Sciences collection (minerals, rocks, gems, fossils)
- ▶ the Vertebrates collection (mammals, birds, fish, amphibians, reptiles)
- ▶ the Invertebrates collection (molluscs, insects, crustaceans, parasites, worms)
- ▶ the Botany collection (algae, vascular plants, mosses, lichens)

In addition, conservation research is conducted to improve the management of the collections.

The Corporation has incurred \$1.4 million in 2005 (2004 – \$1.4 million) for the management, protection and conservation of its collections.

7. Capital assets

(in thousands of dollars)

			2005	2004 Restated (Note 3)
	Cost	Accumulated depreciation	Net book value	Net book value
Land	627	–	627	627
Property under capital lease	35,040	8,924	26,116	27,108
Renovation work in progress	35,456	11	35,445	14,062
Collection cabinets and compactors	3,564	909	2,655	2,757
Research equipment	3,139	1,897	1,242	1,139
Computer equipment and software	3,581	3,552	29	234
Furnishings and office equipment	1,331	1,193	138	232
Leasehold improvements	516	376	140	132
Technical equipment	404	323	81	94
Building improvements	1,882	1,835	47	68
Building	5,312	5,312	–	–
Motor vehicles	45	45	–	1
	90,897	24,377	66,520	46,454

8. Capital lease obligation

The Natural Heritage Building houses the Canadian Museum of Nature natural history collections and administrative functions, on the Corporation's site in Gatineau, Quebec. The Corporation is acquiring the building through a lease purchase agreement with a term of 35 years. It is committed to pay rent under all circumstances and in the event of termination of the lease, at the Corporation's option or otherwise, pay sufficient rent to repay all financing on the building. Management intends to completely discharge its obligation under the lease and obtain free title to the building in 2031.

Future minimum lease repayments, by year and in aggregate, under the financing obligation are as follows:

(in thousands of dollars)

	Obligation under capital lease
2006	3,500
2007	3,500
2008	3,500
2009	3,500
2010	3,500
Thereafter	75,250
Total minimum future payments	92,750 ⁽¹⁾
Deduct: Imputed interest	(60,068)
Present value of financing obligations	32,682⁽²⁾

(1) The amounts payable under the capital lease are based on the fixed interest rate of 9.88%, for a period of 35 years, established at the time of signing the lease.

(2) The present value of the capital lease obligation based on a current market interest rate of 8.15% is estimated at \$38 million.

9. Employee future benefits

i) Pension benefits

The Corporation and all eligible employees contribute to the Public Service Pension Plan. This pension plan provides benefits based on years of services and average earnings at retirement. The benefits are fully indexed to the increase in the Consumer Price Index. The Corporation's and employee's contributions to the plan during the year were as follows:

(in thousands of dollars)

	2005	2004
Corporation's contributions	1,456	1,513
Employees's contributions	680	707

ii) Severance benefits

The Corporation provides severance benefits to its employees based on years of service and final salary. This benefit plan is not pre-funded and thus has no assets, resulting in a plan deficit equal to the accrued benefit obligation. Information about the plan is as follows:

(in thousands of dollars)

	2005	2004
Accrued benefit obligation, beginning of year	1,809	1,620
Expense for the year	282	276
Benefits paid during the year	–	(87)
Accrued benefit obligation, end of year	2,091	1,809
Short term portion	263	185
Long term portion	1,828	1,624
	2,091	1,809

10. Deferred capital funding

Deferred capital funding represents unamortized parliamentary appropriation used to purchase depreciable capital assets. Changes in the deferred capital funding balance are as follows:

(in thousands of dollars)

	2005	2004
Beginning balance	18,287	9,852
Appropriation used to purchase depreciable capital assets	21,778	8,975
Amortization of deferred capital funding	(544)	(540)
Ending balance	39,521	18,287

11. Deferred contributions

Deferred contributions represent unrecognized externally restricted donations and investment income. The changes in the deferred contribution balance and the components of this balance are as follows:

(in thousands of dollars)

	2005	2004
Beginning balance	825	962
Contributions received during the year	1,049	1,227
Amounts recognized in the year	(674)	(1,364)
Ending balance	1,200	825
Deferred contributions are comprised of:		
Funds restricted for programming purposes	1,114	757
Funds restricted for research purposes	79	56
Restricted endowment fund interest	7	12
	1,200	825

12. Endowment

The Corporation maintains an endowment in the principal amount of \$305,000 (2004 – \$285,000) received from Anne and Henry Howden, which included a significant entomological collection. The endowment was established to enable professional studies and research of entomological collections for the Museum.

The principal of the Systematic Entomology Endowment Fund can not be expended. Accumulated interest earned from the endowment must be expended for specified purposes. The earned interests for the current exercise totalled \$5,603 (2004 – \$6,705) which is included in deferred contributions (Note 11).

In the event that the Corporation decides not to maintain entomological collections, the Systematic Entomology Endowment Fund shall be transferred, along with any entomological collections, to the Royal Ontario Museum.

13. Commercial operations

Commercial operations revenue is comprised as follows:

(in thousands of dollars)

	2005	2004
Admission fees	293	650
Rental of facilities	128	296
Parking	105	199
Boutique and cafeteria leases	47	66
Publishing royalties	25	35
Publishing revenues	12	15
	610	1,261

14. Parliamentary appropriation

To achieve its mission, the Corporation relies on government funding. This government funding is comprised as follows:

(in thousands of dollars)

	2005	2004
Appropriation approved:		
Capital and Operating Budget	61,022	33,949
Supplementary budgets	604	58,704
Appropriation lapsed	–	(49,778) ⁽¹⁾
	61,626	42,875
Portion of parliamentary appropriation in current year deferred for future capital projects	(22,736)	(9,016)
Deferred revenue used in current year to complete specific projects	9,532	1,730
Appropriation used to purchase depreciable capital assets	(21,778)	(8,975)
Amortization of deferred capital funding	544	540
Appropriation used	27,188	27,154

(1) These funds were approved on February 9, 2004 for the buy-back of the capital lease for the Natural Heritage Building. However, negotiations could not be concluded by March 31, 2004.

15. Related party transactions

The Corporation is related to all Government of Canada departments, agencies and Crown corporations. The Corporation incurred expenses for the work and services provided by other government departments and agencies. These transactions were conducted in the normal course of operations, under the same terms and conditions that applied to outside parties.

16. Contractual commitments

As of March 31, 2005, the Corporation has contracts for information systems and building maintenance services with a remaining value of \$9,312,668. Future minimum payments under these contracts are as follows:

(in thousands of dollars)

2005-06	5,402
2006-07	3,306
2007-08	443
2008-09	162
2009-10	–

As of March 31, 2005, the Corporation also has long-term contracts for building construction and design services for the renovation of the Victoria Memorial Museum Building with a remaining value of \$38,829,936. This project will be completed in the fiscal year ending March 31, 2010.

17. Contingency

In 1994, a pay equity complaint was filed by the Public Service Alliance of Canada (PSAC) against the Corporation alleging discrimination in wages based on gender inequity. During 2001-02, the PSAC and the Corporation have developed a new Job Classification and Evaluation Plan. This Plan has been used to determine relativity between jobs and to ensure that there is no gender based wage discrimination within jobs. The new plan has been implemented retroactively to June 15, 1999.

The Corporation cannot determine and assess the effect of these complaints on its operations with certainty. A provision for these expenses has been recorded based on management's best estimates. The effect, if any, of ultimate resolution of these matters will be accounted for when determinable.

18. Financial Instruments

The carrying amounts of the Corporation's accounts receivable, accounts payable and accrued liabilities approximate their fair values due to their short term maturity.

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