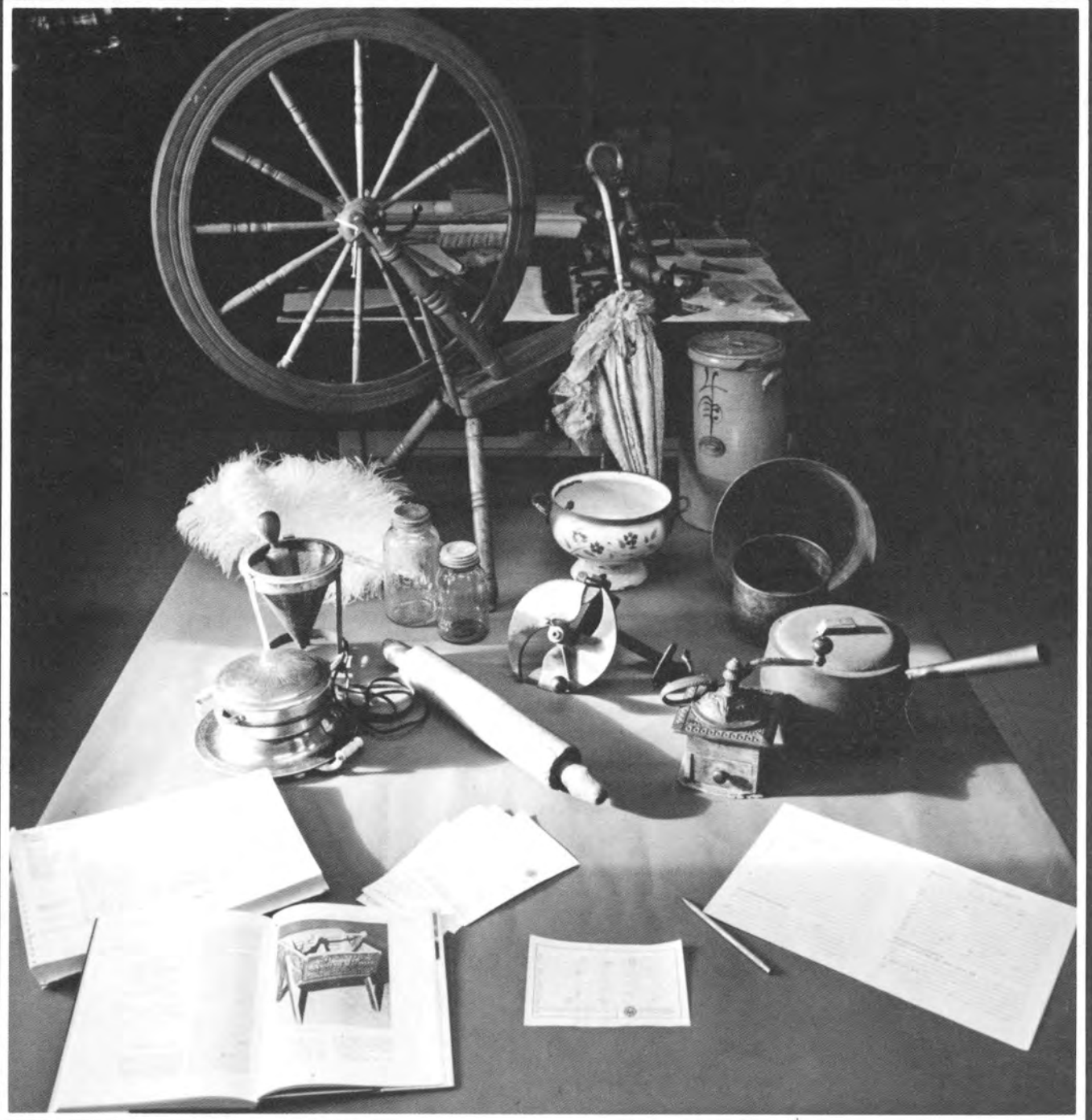


DAWSON & HIND

A PUBLICATION OF THE ASSOCIATION OF MANITOBA MUSEUMS

VOLUME 13, NUMBER 1



Do replicas have a role in exhibits?

Regional Museums Plan

Material History Research and the History of Women

DAWSON & HIND

VOLUME 13, NO. 1,
FALL 1986

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Simon James Dawson was appointed by the Canadian Government in 1857 to explore the country from Lake Superior westward to the Saskatchewan. His report was among the first to attract attention to the possibilities of the Northwest as a home for settlers. He was later to build the Dawson Route from Lake-of-the-Woods to Winnipeg, Manitoba.

William George Richardson Hind accompanied his brother, Henry Youle Hind, as official artist when the latter was in command of the Assiniboine and Saskatchewan exploration expedition of 1858. W. Hind revisited the Northwest in 1863-64 and did numerous paintings of the people and general scenes.

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COVER

Artifacts from the collection
of the Manitoba Museum of
Man and Nature

Photograph by Robert Barrow

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FROM THE EDITOR

The Fifteenth Annual Conference of the A.M.M. held in Winnipeg, September 24-26, was very informative in terms of the issues discussed — museum standards, education, fundraising, volunteers, and museum feasibility studies. The general format of the conference was somewhat different from previous years in that many of the sessions were primarily panel discussions as opposed to more "workshop-type" sessions offered in the past. This new approach proved very successful and provided a good opportunity for exchange between presenters and the audience. Response to the "Exhibitor's Showcase" was excellent, and the evening gave everyone a chance to meet and visit with their colleagues.

The Honourable Judy Wasylcia-Leis, Minister for Manitoba Culture, Heritage and Recreation, was guest speaker at the Red River Banquet, and on behalf of the A.M.M. the Minister presented Honourary Life Memberships to Tim Worth and Terry Patterson for their long-standing and continuing work for the Association. Dr. Jean Friesen, Associate Professor of History at the University of Manitoba, addressed the issue of "Heritage in Manitoba" following the luncheon meeting on Friday in a most interesting presentation.

Future issues of *Dawson and Hind* will include a more detailed report on

the Conference and General Meeting, as well as articles from some of the speakers and panelists. Conference Chairperson Claire Zimmerman and Planning Committee members Nancy Anderson, Geoffrey Chao, Susan Charles, and Craig Dix are to be commended for a job very well done.

Two others who contributed greatly to the Conference on a day-to-day basis are Adonna Kenny and Laurie Gilchrist. Adonna's efforts over the past year in establishing the A.M.M. office have been invaluable and we wish her well in her new country home. Laurie has now assumed responsibility for managing the office, as well as producing the A.M.M. Newsletter.

A special 'thank you' to Tim Worth who has handcrafted a terrific new layout board for the *Dawson and Hind* office. He tells me this is only the prototype — there are bigger and better models under development.

Revision of *Dawson and Hind's* format has been underway for sometime now and I hope you are pleased with the results. The content, however, remains the responsibility of you — our readers and contributors — in addressing the issues that reflect your interests and concerns.

Marilyn de von Flindt

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Individual Membership — open to any resident of Manitoba who wishes to promote the aims of the Association, whether or not he or she is connected with a museum. **Annual fee — \$15.00.**

Associate Membership — this includes institutions and individuals outside the Province of Manitoba who wish to promote the aims of the Association, whether or not such member is connected with a museum. **Annual fee — \$30.00.**

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Annual Budget	Membership Fee
100 - 1,000	\$ 19.00
1,001 - 20,000	31.00
20,001 - 40,000	44.00
40,001 - 80,000	63.00
80,001 - 160,000	94.00
160,001 - and over	125.00

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Do replicas have a role in exhibits?

By E. Leigh Syms

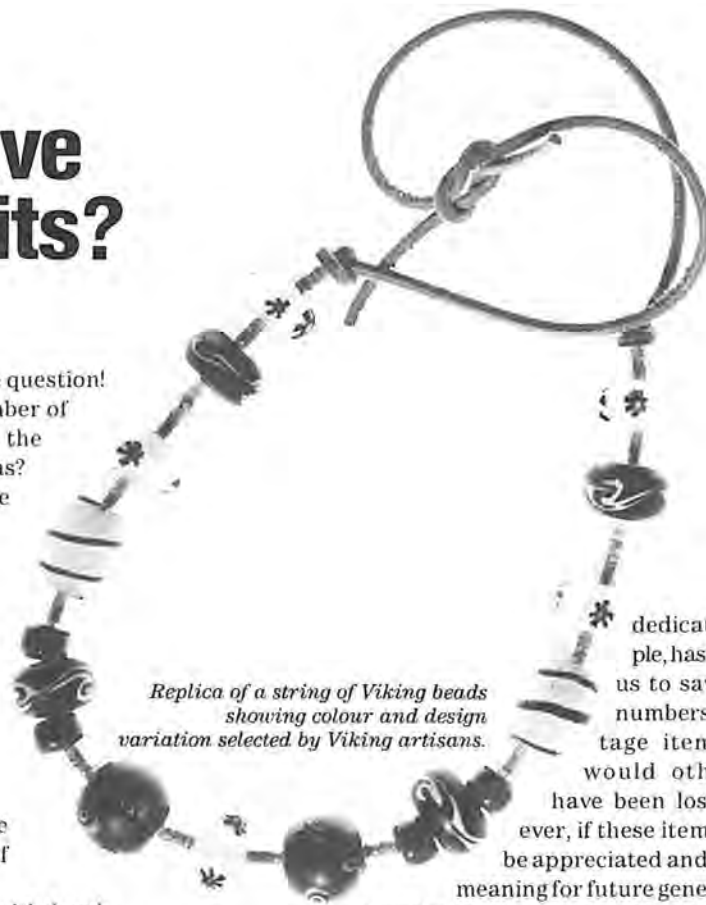
To replicate or not to replicate — that is the question! The use of replicas in exhibits raises a number of questions: Should replicas be used? What are the advantages and disadvantages in using replicas? How should replicas be identified? What are the purposes of exhibits? What role should the museums be playing? For the sake of this discussion, I shall use the term, replica, in a very broad sense; it includes imitative copies, casts taken from molds made from originals, as well as paper and print copies.*

Let us consider the small number of following scenarios in which the use of replicas would become an issue:

1. A natural history exhibit is being developed to show the evolutionary development of the horse but some examples of the various stages of development are missing.
2. A World War I exhibit is being developed with local materials including handwritten documents, rare documents, and original photographs.
3. An exhibit is being developed in which there are considerable quantities of rare and valuable items that are not available, e.g., the recently completed *Viking Exhibit* (see *Dawson and Hind*, Volume 12, Number 4).
4. Ethnographic materials representing the horse culture of the Assiniboins, a group of Plains Indians, is being assembled to travel to smaller centres. Many of the items are fragile, brittle, and sensitive to light.
5. A room is being restored in a heritage house. Period pieces that were known to have been used cannot be obtained but modern identical replicas are available.

All of these scenarios, or similar versions, have arisen and have become the foci of agonizing decisions. A common factor to all is the fact that if replicas are not used, there will be incomplete exhibits, no exhibit at all, e.g., the *Viking Exhibit*, or destruction of original materials as with the ethnographic and military exhibits.

When we consider the use of replicas in the development of exhibits, we must consider what our role or objectives are to be. Museums certainly serve an important role in being repositories of natural and human heritage objects and specimens. The proliferation of numerous museums, many thriving because of the long, tireless efforts of handfuls of



Replica of a string of Viking beads showing colour and design variation selected by Viking artisans.

dedicated people, has enabled us to save large numbers of heritage items that would otherwise have been lost. However, if these items are to be appreciated and to have meaning for future generations, then they need to be set in an interpretive context. Interpretive context usually requires at least label copy, illustrative materials, and clustering of associated artifacts. These associated artifacts (with or without replicas) should provide a message that transcends the artifacts themselves, whether it be the opulence of Viking metallurgy, the starkness of a young World War I soldier's life in the trenches, the affluence of a well-to-do rural pioneer, or the marvels of the evolution of the horse! If the museum exhibits are supposed to have an educational role in addition to being a storage area or nostalgic entertainment for older community members, then a complete exhibit must be considered to be important even if replicas must be used to augment or replace existing materials.

One must ask then, how complete is "complete"? How much detail is required? How representative a sample is necessary? As soon as we agree that an exhibit is *more* than the storage of items, i.e., that it entails recreating feeling or atmosphere, recreating activities or experiences, or teaching in any sense, then replicas are justified to fill exhibit gaps. The fewer gaps there are, the more effective the exhibit will be.

Among the above scenarios, there are several cases of

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potential destruction of originals. When using perishable originals in excessively exposed exhibits such as bright light, we can almost see the disintegration taking place and the impact will be measurable within the relatively short period of years or decades. The black ink of the World War I letter turning brown, then lighter and lighter until the original message is totally indecipherable creates a useless scrap of paper that was, only a short time before, a gem of knowledge. An Assiniboin bow quiver decorated with brilliantly dyed porcupine quills in geometric patterns becomes fainter and fainter, never again to reveal the richness of colours nor artistic or cultural choices in colour combinations.

The issue of the destruction of materials seems straightforward. Surely the loss or fairly rapid and irreplaceable damage of items such as the above mentioned letter and quill work can not be condoned! Yet, decisions have been made to expose such fragile originals to the current generations. How can we justify allowing the loss of an irreplaceable item made decades or centuries earlier to be destroyed for the sake of only one or two current generations to see an "original," after which all future generations will be deprived of seeing these pieces? The use of good quality replicas appears to be the obvious solution in these situations.

Then there are the more extreme cases where exhibits of originals can never be available for appreciation except to a handful of exhibit centres across North America. Original works such as those of the Egyptian pharaohs, Romans, Babylonians, or Viking metallurgists are rarely allowed to

travel and then only to a few centres usually because of prohibitive security requirements. These items remain inaccessible and beyond the reach of the vast majority of the public. Through the use of replicas, some of these items can have a much wider distribution and the public can develop an appreciation for the cultures involved that can never be achieved through pictures in books.

One cannot deny that there is one loss in the use of replicas. One can no longer hold an item and, with the use of the imagination, develop a sense of an emotional bridge, a oneness with the persons who made and used the item. However, good quality replicas can fulfill most of the purposes of an exhibit artifact. They can complete the sets of associated items to provide a "whole picture" as well as provide the same visual appreciation for the quality and complexity of artistry and workmanship of the producers and the ingenuity and resourcefulness of the owners.

If replicas are to be used, then there is the problem of identifying them as such. If a large number of replicas are used and the identifying label copy of each item is marked conspicuously with "replica," then the awareness of the exhibit viewers soon focuses on "replica" rather than the overall interpretive knowledge, atmosphere or experience that is desired. This is not unlike the situation in which donors' names are affixed to items, and the public focuses their attention on the names of the people rather than on the overall exhibit. One technique to reduce these distractions is to have one text panel that lists the exhibit items plus donors' names and those artifacts which are replicas. If this is still considered to be a distraction, then at least a statement of recognition of the use of some replicas seems wise.

In conclusion, the use of replicas in exhibits seems to be not only desirable but inevitable if we are to be concerned about preserving our fragile heritage items and about presenting meaningful exhibits. By using replicas, we reduce the short-term destruction of fragile items so that they may continue to be available for intermittent observation, research, and appreciation for many generations, centuries, or millenia. The presence of replicas can greatly enhance the exhibiting of more durable items to create interpretive overviews. Surely these are worthy alternatives to artifact destruction and/or incomplete exhibits, not to mention nonavailability of some exhibit topics!

These thoughts are the personal reflections of the author.

Dawson and Hind invites submissions and responses to "Editorial." Letters may be edited for purposes of space or clarity. Please address your correspondence to the Editor, **Dawson and Hind**, 440 - 167 Lombard Avenue, Winnipeg, Manitoba R3B 0T6.

Replica of a gold filigree pendant.



Manitoba's Heritage Resources Act

By Leo Pettipas

Following two years of consultation and review with concerned individuals and groups in the heritage community, the eagerly-awaited Heritage Resources Act became law on 12 May 1986.

The Act resulted from growing public recognition that tangible legacies of our past — although many — are not limitless. When lost or destroyed, they can never be replaced. The new legislation is intended to assist Manitobans in keeping and sharing their heritage resources, and to ensure that information gleaned from these resources is preserved and passed on for the benefit of future generations.

The new Act replaces The Historic Sites and Objects Act proclaimed in 1967. Since then, increased public expectations about protecting our heritage resources, and recognized weaknesses in the old legislation, meant it no longer met current needs.

Compared with similar legislation across the country, the old act had many deficiencies. For instance, although a planning process was required to ensure heritage values were considered when land development threatened heritage sites and buildings,

broader measures were needed to adequately protect those heritage resources deemed to be provincially significant. In establishing community values, the legislation also lacked provisions for public involvement in the review process for designating provincial historic sites. At the local level, incentives were missing to encourage community involvement in identifying and participating in local heritage issues and education.

Revamping the legislation began in June 1984 with establishment of a comprehensive consultation program involving affected groups to review the existing legislation. This involved preparing a discussion paper, questionnaire, and audio-visual presentation to focus on issues for discussion. Four major interest groups were identified for consultation: municipal governments, commercial and construction

interests, heritage organizations, and the general public.

The discussion paper and questionnaire were sent out in September 1984 as background for meetings starting in October between former Minister The Honourable Eugene Kostyra, his staff, and municipal officials and the general public in Brandon, Morden, Arborg, Flin Flon, Oakbank and Dauphin. In Winnipeg, meetings were held with fifteen organizations considered most likely to be affected by the proposed legislation.

The consultation program affirmed strong support for the concept that heritage resources are important provincial assets which must be preserved, protected, and enhanced. The participants also endorsed proposed objectives for the new legislation.

Following consultation, new legislation was drafted, incorporating many recommendations. It centers on three basic principles:

- improved powers to protect historic resources
- improved planning
- increased community involvement

This June, immediately following proclamation, Donna Dul, Director of

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and Recreation**



This partial skull of an extinct species of bison is an example of a palaeontological object.

the Historic Resources Branch with responsibility for administering the Act, staged a second series of public meetings in nine Manitoba communities to outline the new legislation. She explained new programs under the Act and new opportunities for public involvement in heritage preservation. She also encouraged municipal councils, heritage-interest groups and local service clubs and businesses to take on preservation projects in their communities. The enthusiastic response to the presentations from elected officials and businesses alike confirmed the need for this progressive legislation.

What does the new Heritage Resources Act mean for Manitobans? It provides:

- legal means for municipalities as well as the Province to legally protect, designate and identify significant heritage sites and structures
- incentives to assist enhancement of local heritage commemoration and interpretation, thereby increasing public awareness of Manitoba history
- powers to authorize impact assessments and measures to minimize damage where development would adversely affect important heritage resources
- new ownership definitions for "heritage objects" — particularly archaeol-

ogical resources — which balance the private and public interest

"Heritage objects" are of particular interest to the museum community since under the Act such objects are typically part of museum collections and displays. They include:

- archaeological objects from prehistoric and historic periods, such as potterysherds, stone arrowheads, scraping tools, or excavated fur trade artifacts
- palaeontological specimens, such as dinosaur bones
- natural heritage objects (for example, impressions of plants in shale)
- "designated heritage objects"

The last category, "designated heritage objects" — although seemingly ambiguous — covers significant heritage objects which may otherwise "fall through the cracks" because they don't fit into other categories.

Archaeological, palaeontological, and natural heritage objects are closely associated with specific sites — on or under land or permanent water bodies. They are as important for where they are found as for what they are.

"Designated heritage objects" encompass historically-important artifacts not associated with specific sites, but with specific individuals, groups, events, themes, or periods in Manitoba's past.

These could include historical documents or objects like clothing or implements. They would not have been lost or discarded and then found again in the archaeological sense. Legal protection for such objects is available only through "designation" as heritage objects by special legislation from the Lieutenant-Governor-in-Council.

Why are heritage objects so important?

Although animal life has existed in Manitoba for the past 570,000,000 years, and human beings have lived here for at least 12,000 years, animal remains or fossils, as well as human artifacts such as tools and weapons found on or under the ground, are the only traces from these vast periods of our natural and cultural history.

These fossils and artifacts — collectively known as "heritage objects" or "heritage resources" — are vital for reconstructing past life in the province. They are not merely curios or amusing conversation pieces, but when properly gathered and studied, are important for the information they contain about Manitoba's past. For museums, they are invaluable in displays for public education, by illustrating our past through tangible examples.

Equally important, these heritage re-

sources are nonrenewable. Once lost, they are lost forever. Unlike present-day trees, fish, and mammals which continually regenerate evidence of their existence, fossils are nonrenewable because life forms whose remains produced them are now extinct.

In addition, human lifeways — even those from only a few hundred years ago — have been modified so extensively by cultural development that our knowledge of them is available only from remnants left behind. These remnants include: oral histories based on people's memories, archival manuscripts, historically significant artifacts, and archaeological specimens. The new legislation creates a role for all Manitobans as protectors and preservers of these irreplaceable resources.

The Act makes specific provisions to protect heritage objects, although most clauses apply to archaeological and palaeontological objects. As explained earlier, historical objects generally dating from the fur trade to the present and not found as part of archaeological excavations, are not covered by the Act unless they are specifically designated. The following questions and answers highlight some of these provisions.

Who owns Heritage Objects?

The new Act makes major changes to ownership of heritage objects. Under the 1967 legislation, found archaeological and palaeontological objects were the legal property of the landowner. This meant objects discovered on Crown land belonged to the Province, while those discovered on private land belonged to the property owner.

The Heritage Resources Act gives ownership to the Province of all archaeological, palaeontological, or natural heritage objects found after the new Act became law on 12 May 1986, regardless of where they are found. However, those collected while the former legislation was in force will continue to belong to the landowner.

The main reason for change from private to Crown ownership is the need to provide better protection. Crown ownership provides the basis for the

Province's trust obligations to protect heritage objects, and the Act contains measures for protecting this property.

What provisions does the Heritage Resources Act make for possessing Heritage Objects?

Although the legislation separates issues of ownership and custody, its provisions are flexible. It allows the finder to keep found objects in trust for the Crown, even those found on Crown or municipal land — except in specified areas, like parks and special preserves. On private land, the landowner holds custody, unless someone else is the finder and obtains approval of the landowner to acquire custody.

The finder or owner of a heritage object can give custody of the object to the Crown, or if desired, transfer it to any other person at any time. On the death of the custodian, custody will pass to the custodian's heirs, executors, or administrators. In addition, the Minister can transfer full ownership to individuals or private institutions. This is intended to assure the public that special interests concerning private ownership can be duly considered under the Act.

These provisions recognize the important role played by many amateur archaeologists in Manitoba who assemble collections of artifacts, which form the basis of numerous studies and publications expanding knowledge of our past. The new act should enhance the role of the amateur archaeologist.

What are the implications of the new ownership-possession provisions for museums?

For museums with archaeological or palaeontological collections, donations to their holdings accepted before 12 May 1986 belong to the museums. But museums may still obtain ownership of collections donated after May 12 if the donor acquired them prior to that date. Collections gathered after May 12 now belong to the Crown, although possession may be legally transferred from donor to museum for the museum to hold in trust.

Historical objects discussed earlier such as native ethnological material, fur trade or pioneer artifacts do not automatically become government property. Ownership of these remains with the person or museum to whom they belong. Under special circumstances, historic objects may be specifically designated, but this would probably not occur often. Ensuring the history of our historic collections is recorded and preserved along with the objects themselves is of primary importance.

What regulations govern removal of Heritage Objects from the province?

A major obstacle hampering our ability to reconstruct the past is uncontrolled removal of heritage objects from the province, through sale or trade, by departing residents taking objects with them, or by nonresidents taking home heritage objects they unearthed or purchased. The potential loss of important information about our past contained in valuable heritage objects scattered beyond our borders is impossible to estimate.

Through The Heritage Resources Act, the Province now has authority to prevent removal of Crown-owned objects, or to attach conditions for removal. The Act requires anyone wishing to take heritage objects from the province to obtain a permit regardless of when or where the objects were found — on private or Crown land. This asserts the position that the heritage information these resources contain is valuable to all Manitobans regardless of ownership.

Requiring a removal permit affords the Province an opportunity to negotiate for objects to remain here or at least to document them so the information they contain stays here, if they are privately owned and retention here is not possible.

Community museums have a valuable role in helping educate collectors about the importance of keeping heritage and historic objects, or the information about them, within the Province.

Why is it necessary for individuals to report their heritage findings?

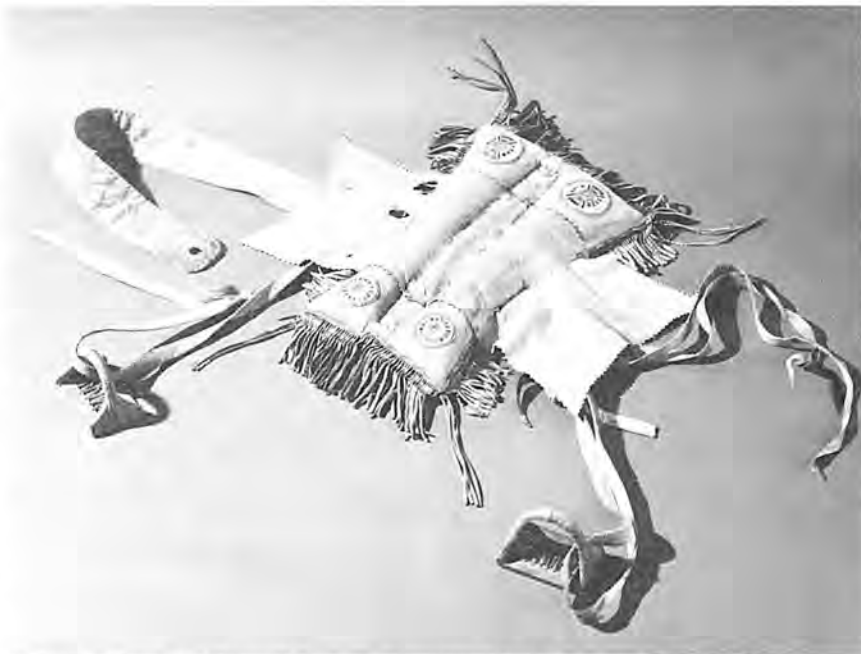
The Department of Culture, Heritage and Recreation recognizes that to effectively discover, research, and interpret field information — requires greater capability than its own staff and resources can provide. Much of this found information is discovered by private individuals, either accidentally or through searches for heritage objects. When referred to department archaeologists and historians, the significance of the information can be assessed in a provincial context and made available for public benefit.

To assist with information gathering for broader public use, the Act requires anyone finding a known or potential heritage object to report the discovery to the Department. Objects accidentally discovered in the ground which appear to be still in place should be left untouched and the Department informed, since the placement and location of such discoveries could prove important to understanding local or regional history.

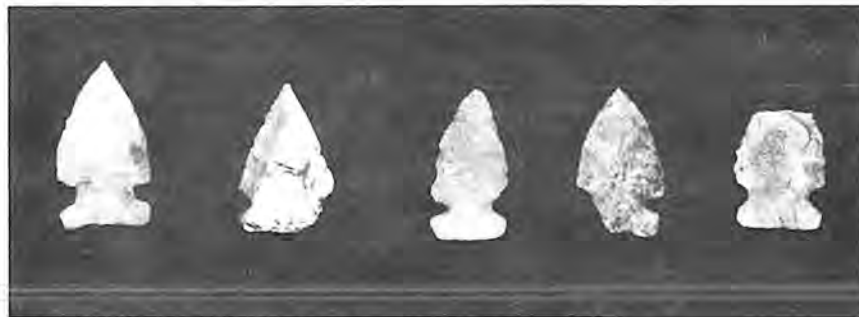
Why are permits needed for searching or excavating?

Archaeological and palaeontological sites and objects constitute fragile resources which require careful and expert handling. A range of sophisticated techniques have been devised by archaeologists to gather specimens and information from the field in an orderly and scientific fashion. Even in previously disturbed sites like plowed fields, documenting how different objects cluster together may still be possible, and may contribute important information to the archaeologist interpreting that site.

Since searching and excavation affects publicly-owned heritage objects, the Province expects these resources to be handled properly using approved techniques. Consequently, the new legislation requires anyone wishing to collect or excavate for heritage objects to first obtain a permit from Manitoba Culture, Heritage and Recreation. This allows qualified department staff to



This early Metis saddle could become a heritage object if it were so declared by special regulation.



These arrowheads are examples of heritage (archaeological) objects.

specify the kind of work applicants will be allowed to do based on their qualifications and experience. The permit may also stipulate that investigation results must be reported to the appropriate provincial agency. Reporting provides an opportunity for new information to be organized and presented to the public as part of the department's mandate.

Those wanting additional information concerning the archaeological, palaeontological, and natural heritage object provisions of The Heritage Resources Act should contact Leo Pettipas, Chief of Archaeology at (204) 945-4392. Details concerning heritage object designation and the relationship between

museums and The Heritage Resources Act are available from David McInnes, Heritage Resource Officer at (204) 945-0404. Two booklets titled *Heritage Objects* and *Impact Assessment*, which provide further detail on specific aspects of the Act, are available from the Historic Resources Branch, 3rd Floor, 177 Lombard Ave., Winnipeg, R3B 0W5.

For additional reading, previous *Dawson and Hind* articles pertaining to local museums' use of archaeological objects include: "The Role of Community Museums in Manitoba Archaeological Resource Conservation," Volume 11, No. 4, 1984; and "Archaeological Exhibits, An Exciting Cultural Heritage Resource," Vol. 10, No. 4, 1982.

Material History Research and the History of Women

By Sharon Reilly

*The following paper was presented to "Women in Manitoba History," the Second Annual Canadian Studies Conference, St. John's College, University of Manitoba, January 24-25, 1985, and is reprinted by permission of the author and Canadian Plains Research Center, University of Regina. This article appears in the forthcoming book **First Days, Fighting Days: Women in Manitoba History**, edited by Mary Kinnear. The book is to be published in Spring 1987.*

In recent years, research into the history of women in Canada has undergone remarkable growth and development. In a 1982 issue of the *Canadian Historical Review*, Eliane Leslau Silverman commented that women's history in Canada today is a "burgeoning field" from which a "voluminous, rigorous and often lively literature is emerging."¹ But even as she applauded the efforts of Canada's new generation of women's historians, Silverman warned that their work too reflects the limitations of working within a disciplinary tradition — even when it attempts to analyze such new and provoking subjects as the institutions of social change, the processes of change, the material bases of life, or popular beliefs and perceptions. Too often, she says, historians write on subjects merely because they are accessible. Silverman challenges women's historians

to be more daring than they have been, more prepared to ask new questions, to speculate even from fragmentary data, to be suggestive as well as definitive.²

This is essential, she says, if historians are to "retrieve women's lives from the silence."³

Like the history of the family or working class history, the history of women is a theme within the field of social history that emerged in Canada beginning in the early 1970s. Per-

haps the most distinguishing feature of this 'new' social history is that it brought non-elite populations into the realm of academic enquiry — populations who, for the most part, left no written account of their lives.

It is hardly surprising, then, that historians investigating the lives of women should focus — as Silverman suggested — on topics where at least some documentation exists — limited though it might be. Joan Wallach Scott began her exhaustive survey of British, European and American writings in *Women's History in Past and Present*, in November 1983, with a call similar to that of Silverman for rooting out new sources of evidence and new methodologies. She began with a quote from Virginia Woolf in *A Room of One's Own*.

"What one wants . . ." wrote Woolf, ". . . is a mass of information; at what age did she marry; how many children had she as a rule; what was her house like; had she a room to herself; did she do the cooking; would she be likely to have a servant? All these facts lie somewhere, presumably in parish registers and account books; the life of the average Elizabethan woman must be scattered about somewhere, could one collect it and make a book of it . . ."⁴

As a social historian working with artifacts on a daily basis, I would suggest that one of the best under-utilized sources of information concerning the lives of women (as well as other subjects of social history) is to be found in material history evidence. If one wants to know what the houses of Elizabethan women looked like — then what

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better way to find out than to go out and look at them? If we want to know what it was like to cook for a family in a late 19th or early 20th century household, or what it was like to do the laundry or the sewing, then why not look at, or better still, pick up and examine the tools, implements and products which these women used? The same holds true for any other household task, or indeed, for any other activity, inside or outside the home.

Unfortunately, university historians have traditionally ignored material history in favour of documentary research, and even today remain largely unaware of the scholarship being produced in this field. And museum historians, traditionally antiquarians or collectors, often have remained isolated from much of the academic research being done. As prominent U.S. material culture historian Thomas Schlereth observed to a Canadian museum audience in 1979,

The formal study of American history over the past two centuries has largely been written without reference to the three-dimensional evidence of the American past, while the preservation, restoration and interpretation of artifacts has also too often proceeded on the basis of outmoded historical theory or inadequate historical research.⁵

Schlereth noted, though, that there were a few signs of greater collaboration developing in some areas between 'university' and 'museum' historians.⁶

One area where important attempts at such synthesis are underway is in the study of women's history. The increased interest in this subject in recent years and the paucity of extensive written documentation have combined to foster a growing appreciation of the abundance of artifactual data available to scholars, and have inspired exciting material history research on women.

Ruth Schwartz Cowan, an Associate Professor of History at the State University of New York, is considered a leader in this field. In 1973 she presented her landmark study on the 'Industrial Revolution in the Home'⁷ to the Society for the History of Technology. Cowan's interest was in the impact of new technology on women's domestic role in the early 20th century.

Her paper asked questions about the 'industrial revolution' in the home similar to those that social historians like E.P. Thompson has asked about the implications of industrialization for workers in the new factories.⁸ This latter research showed that, despite the benefits that resulted from industrialization, workers also suffered the loss of skills and diminishing control over the work process, and had to contend with the rigors of industrial discipline, unsanitary and hazardous working conditions, and meager wages.

Cowan found that the assumptions made about the liberalizing impact of new industrial technology in the home were more difficult to challenge, however, for here the facts were even more difficult to reveal. Pay schedules, time charts, and the evidence of Royal Commissions simply do not exist to help historians to reconstruct the lives of women whose workdays were spent in the home. What impact, for example, did early 20th century technological change have in the home upon 'Blue Monday,' with its arduous tasks of washing and ironing the family's laundry? In order to answer these questions, Cowan utilized not only

traditional documentary evidence such as social surveys and government statistics, but also examined household interiors and domestic utensils. She concentrated primarily, though, on a frequently overlooked type of material history evidence — pictorial advertisements in women's magazines. Using this combination of data, she found that

The electrification and mechanization of the American household in at least four activities — laundering, heating (both for cooking and for human comfort), cleaning, and food preparation and storage, amount to nothing less than a genuine industrial revolution . . .⁹



1 200-Watt Taylor Iron, c. 1920.

COURTESY ROBERT BARROW

3 Contraceptives, c. 1930s.

4 Birthing Mat, c. 1930s.

2 Kerosene Iron, c. 1920s.



COURTESY GERRY BERKOWSKI

In 1917, she found, 24.3% of American households had electricity. By 1930, this figure had risen to 84.8%. Not only did this mean the disappearance of gas and oil lamps in favour of electrical lighting, but many small electrical appliances, including the electric iron, quickly appeared.

"Ironing," wrote Cowan, "had traditionally been one of the most dreadful household chores, especially on warm days when the kitchen stove had to be kept hot for the better part of the day; irons were heavy and they had to be returned to the stove frequently to be reheated. Electric irons," she

found, "eased a good part of this burden. They were relatively inexpensive and very quickly replaced their predecessors; advertisements for electric irons first began to appear in the ladies magazines after World War I, and by the end of the decade the old flatiron had disappeared; by 1929 a survey of a hundred Ford employees revealed that ninety-eight of them had new electric irons in their homes."¹⁰

Cowan continued her investigation with an examination of the washing machine, and the impact of the appearance of soap powders on the market in the early 1920s, which potentially eliminated the need to scrape and boil bars of laundry soap. She concluded that, by the end of the 1920s, 'Blue Monday' must have been considerably less 'blue' for some housewives — but it was probably considerably less 'Monday' as well, for with an electric iron, a washing machine, and a hot water heater, there was no need to limit the washing to just one day of the week.

With the new, more convenient household appliances, women were expected to manage all domestic tasks easily, despite the disappearance of domestic servants during these years, and household standards quickly became more exacting. Instead of decreasing the amount of labour that was necessary for the housewife to expend, the new technology increased it. This increase in women's home labour was intensified further as new ideologies emerged with the rise of consumer advertising aimed at women.

"After the war," wrote Cowan, "housework changed; it was no longer a trial and chore but something quite different — an emotional 'trip.' Laundering was not just laundering, but an expression of love; the housewife who truly loved her family would protect them from the embarrassment of tattletale gray." And so on . . .¹¹

Cowan's work provided much of the inspiration for recent research on women's domestic work in Canada, including that of Barbara Riley, an historian at the National Museum of Man in Ottawa.¹² It, too, was informed by traditional archival research, but Riley's study placed a greater emphasis than Cowan's did on artifactual data. By examining artifacts and interviewing their owners about the ways in which they were used, Riley was able to discover important new information about the transition from the use of the flatiron to the electric iron and, consequently, about women's lives in the 1920s. It was a transition, she learned, that was not as linear a process as Cowan's work suggested.

Despite the fact that electric irons replaced flatirons in popular advertising by the end of the 1920s, and although they may have appeared in most people's homes by that time, the art of ironing had not, in fact, been completely revolutionized. Flatirons, Riley's interviewees informed her, were used alongside the new electric irons — and were considered to be more convenient. Not only were they easier to heat, (on the kitchen's already hot coal stove) but, to the experienced housewife, their performance was more reliable than that of the first electric irons, which had no temperature controls or indicators. And, if one is convinced that, if nothing else, the first electric irons had their lighter weight to commend them, an examination of at least some early models, such as the one seen here (ill. 1), quickly



COURTESY GERRY BERKOWSKI



COURTESY GERRY BERKOWSKI

refutes that idea. It weighs 17 pounds. 220-Watt Taylor irons such as this one, collected in Kleefeld, Manitoba in 1967, are said to have been common in the early 20th century and were later used as tile removers. An examination of the intermediary or alternative technology — the kerosene-burning iron, (ill. 2) — quickly reveals that it too was inconvenient and required considerable skill to operate, as well as being messy.

Artifactual evidence, then, properly interpreted, can provide an important alternative perspective on the past and sometimes can provide information that is otherwise not available. Consider also, for example, the wealth of information that a common 19th or early 20th century object like a quilt can offer us about women's lives. The artistic skill of the maker, her frugal habits in collecting bits and pieces of old cloth, her manual dexterity and patience in their assembly, her social life as represented by the quilting bee, and her need for warmth, comfort, and perhaps some special symbolism in the pattern she created, all are reflected in such an artifact. Society's patriarchal values also are reflected in the shunting off of this, and other similar women's skills, into the lesser category of 'craft' as opposed to 'art.'

Or, what of the insights that material history evidence might offer on a virtually undocumented, but central issue in women's lives like the history of reproduction and contraception? Artifacts like contraceptive gel — which contained lactic and boric acid — or "Menopax" tablets for "the relief of vasomotor and nervous symptoms of the menopause," or "Wycones Vaginal Suppositories" which combined the functions of "sedative, deodorant, and astringent" offers some insights (ill. 3). One of the most interesting objects in this genre I have seen is the birthing mat (ill. 4). Made from layers of newspaper and covered with white absorbent cloth, this artifact conjures up a vivid image of what childbirth must have been like in an isolated pioneer home.

Clearly, great potential exists in such objects as these for the research, analysis and interpretation of women's history. If, thus far, this evidence has failed to make its way into the historical profession's written accounts of women's lives — what have museums done with it? Not surprisingly, just as university historians traditionally focussed on the 'great men' of the past, and on the political and economic issues that surrounded them, history museums too tended to focus upon society's elite. Very little information was presented in museum exhibits that dealt with the lives of ordinary working people, or of women of any class.

Historian Michael Wallace discussed this problem in a 1981 issue of *Radical History Review*, in which he examined a variety of American museums built since the mid-19th century.¹² Usually founded by old patrician families, industrial magnates, and powerful financiers, these institutions, Wallace argued, reflected the world view of the elite who sponsored them. He looked, for example, at John D. Rockefeller Jr.'s Colonial Williamsburg — where life in 18th century Virginia was depicted without even a mention of the working women and men who made up 90% of the colony's population. Black slaves, who made up most of this population, were given no place at all in this museum. This failure to accurately portray the historical context of the period depicted was evident even in the museums that featured the experiences of domestics, craftworkers and farming families, because they left out all those who comprised the

upper stratum of society. In doing so, Wallace concluded, they eliminated any possible references to the social, political and economic realities experienced by the women and men depicted in these museums.

Canada, too, has its share of museums that contain impressive collections but which do little to interpret the historical period from which their treasures sprang. These include not only institutions that date back to the years of antiquarianism, but also more recent efforts, like the newly opened George R. Gardiner Museum of Ceramic Art in Toronto. Housed in a modern 'art gallery-like' setting, this museum boasts a beautiful and extremely valuable collection of porcelain and pottery. The pieces are displayed as



COURTESY GERRY BERKOWSKI



COURTESY GERRY BERKOWSKI

objects of art, however, with few references to the men and women who made, decorated, purchased, owned, or cleaned them.

On a more optimistic note though, the years since the Second World War have seen an unprecedented growth and interest in popular history museums across North America. Here, in re-created pioneer villages, restored houses, reconstructed forts and other museums, Canadians can learn about some aspects of their own history. In part, no doubt, because of the ready availability of appropriate artifacts, but also, perhaps, because of the relatively large numbers of women working in these museums, the intricacies of female tasks of bygone years receive high priority in these mu-

seums. Butter making; soap and candle making; baking bread or cooking on a wood stove, using cast iron pots and kettles; quilting bees; and many other such scenes of typical pioneer life are demonstrated in dioramas, or acted out by costumed interpreters at these sites.

When we begin to look beyond the domestic role of women in colonial and early rural life, however, we find that far less information is presented. What, for example, do museums tell us about the history of reproduction and contraception? As we have seen, the artifacts exist to allow us to explore this theme. The Museum of the History of Medicine, in Toronto, has perhaps made the best start in Canada at documenting this history, but freely admits there is a long way to go. Numerous delightful porcelain figures depicting the once common female occupation of wet-nurse are featured at this museum, along with dozens and dozens of 18th and 19th century baby rattles and pap bottles. These fascinating artifacts are filled with information about women's lives, child raising practices, infant mortality, and societal customs and attitudes, and question after question springs to mind as one views them. Who were these wet-nurses, so romantically portrayed in porcelain? Did they come from a particular class? Did they serve a particular class? How many were there? For how many years did — or could — a woman perform this function? How many infants — and of what ages — did she care for? How was she viewed by the women and men of her time? Certainly, whoever made the figurines saw her as the ideal of womanhood. What became of her?

And what of the pap bottles? Similar in shape and design to the early 20th century baby bottle (ill. 5), but open bowl-like, at the top, these vessels were used to literally force-feed infants incredible volumes of a thin gruel mixture. Their usage is thought to be responsible, to a considerable extent, for the high infant mortality rates of their era. Yet the finely crafted and ornate character of these bottles loudly proclaims their owner's pride and pleasure in their newborn. Unfortunately, these and other questions are not explored. As currently organized, these objects remain little more than a collection of curios that reflect the particular interests of the children's doctor who originally assembled them.

A lack of research, analysis and interpretation is not the only problem from which museum collections can suffer. They may have a variety of deficiencies, beginning with over-representation in some areas, and under-representation or non-representation in others. This can happen, as with the Museum of Medicine, because a valuable but select private collection comes into the museum's care. It also commonly happens because most publicly owned museums have limited funding, and rely upon public donations to fill their storage spaces. What ends up in a museum's collection, therefore, is often a reflection of what the public *thinks* should be there and *which* members of society consider their property important enough to be deposited in a museum. Wedding dresses, christening gowns, fine silk stockings, and elbow-length kid gloves have to be turned away, while aprons, house dresses or underwear remain a novelty (ill. 6).

Not only must today's museum historians cope with the collections assembled by their predecessors — who may have had very different interests or a different ideological

5 *Baby Bottle, c. 1920s.*

6 *Storage room, Manitoba Museum of Man and Nature, showing collection of evening gloves.*

7 *"Concerning Work" Exhibit, Manitoba Museum of Man and Nature.*



COURTESY DOUG SMAILL

outlook than themselves — they also often face a lack of complete — or any — documentation. This is no doubt related to the traditional separation which I spoke of between the 'historical profession' and historians working in museums and at historic sites. Until recently, artifacts in museums were commonly seen as the 'relics' of great men, or as antiquities or curios — not as pieces of historical evidence to be analyzed and interpreted. As Barbara Riley put it,

"Artifacts were regarded pretty much as an end in themselves — you collected them, you identified them, and you put them in an exhibition — and that was the end of it. (They) had served (their) purpose."¹⁴

Important historical data and, therefore, the cultural significance of an object was easily lost.

In museums and at historic sites across Canada today, however, various projects are underway that combine academic and material history research. The work being done by Barbara Riley on domestic work, food production, and household technology is one example. Other projects have investigated the social history of quilt making, and the furnishing and organization of kitchens. Recent exhibits have looked at the effect of the typewriter and dictating, calculating and duplicating machines on the evolution of office work; and on the participation of women in the pre-industrial, outport cod fishery of Newfoundland.¹⁵ An exhibit currently being developed in Ottawa will examine the history of maternity, birth and childhood. The 'Concerning Work' Exhibit produced at the Manitoba Museum of Man and Nature last year placed considerable emphasis on the changing role of women's work both in the home and in the workplace as it explored the impact of technological change from 1850 through to the year 2000 (ill. 7 and 8).

In my own current research, on fraternal orders, benevolent societies and early trade unions in Manitoba, I am discovering not only a vast array of fascinating artifacts but also important information about attitudes toward women and the participation of women in these organizations. For example, the Benevolent and Protective Order of Elks, a fraternal secret society transplanted to Canada from the United States in 1912, excluded female members from its ranks. During his initiation, however, each candidate pledged never to "violate the chastity of the mother, sister, wife or daughter of a Brother Elk. This vow," he pledged, "shall keep them as sacred to me as my own mother." Virtually nothing is known about the significance and role of such organizations in men's lives — much less in women's. Yet women actively participated in groups like the Order of the Eastern Star, the Eagles, the Orange Order and the Oddfellows, and of course the Daughters of the Empire, the Women's Christian Temperance Union, and many early trade organizations (ill. 9 and 10).

In order for museums to accomplish successfully their mandate regarding the documentation and interpretation of women's history, and, I think, in order for university historians to succeed in meeting the challenge of writing a more complete and sensitive chronicle of women's lives, it will be necessary for more projects of this kind to be undertaken. The traditional separation between material history research and academic research must be overcome and in its place must come a sharing, not only of kinds of historical

evidence and methodologies, but also of historical theories and conjectures.

Footnotes

1. Eliane Leslau Silverman, "Writing Canadian Women's History, 1970-82: an Historiographical Analysis" in *Canadian Historical Review*, Vol. LXIII, No. 4 (December 1982) p. 513.
2. *Ibid.*, p. 531.
3. *Ibid.*
4. Joan Wallach Scott, "Women in History: Survey Articles — The Modern Period" in *Past and Present*, 101 (November 1983) p. 141.
5. Thomas J. Schlereth, "Material Culture Studies in America: Notes Toward a Historical Perspective" in *Material History Bulletin* 8, papers from Canada's Material History: A Forum, 1 - 3 March 1979 (Ottawa, 1979) p. 95.



COURTESY DOUG SMALL



COURTESY GERRY BERKOWSKI

6. Ibid. See also Charles T. Lyles, "The Historian's Attitude Toward the Artifact" (M.A. thesis, Winterthur — University of Delaware, 1972); and E. McClung Fleming, "The University and the Museum: Needs and Opportunities for Cooperation," *Museologist* 3 (June 1969) pp. 10-18.
7. Ruth Schwartz Cowan, "The 'Industrial Revolution' in the Home: Household Technology and Social Change in the Twentieth Century" in Thomas J. Schlereth, ed. *Material Culture Studies in America*, The American Association for State and Local History, Nashville, Tennessee (1982) pp. 222-236. Reprinted from *Technology and Culture* 17 (January 1976) pp. 1-23.
8. Edward P. Thompson, "Time, Work-Discipline, and Industrial Capitalism" in *Past and Present* 38 (December 1967) pp. 56-97.
9. Thomas J. Schlereth, in his introduction to Ruth Schwartz Cowan, "The 'Industrial Revolution' in the Home," p. 223.

10. Ruth Schwartz Cowan, "The 'Industrial Revolution' in the Home," p. 226-227.
11. Ibid., p. 232.
12. Barbara Riley, "Technology in the Home: Domestic Food Production in British Columbia, 1900-1930," an unpublished presentation given at the Women and Technology session of the Canadian History of Science and Technology Association Conference, Kingston, Ontario (October 1983).
13. Michael Wallace, "Visiting the Past: History Museums in the United States," in *Radical History Review* 25 (1981) pp. 63-96.
14. Barbara Riley, "Domestic Work: Oral History and Material Culture," a presentation to the Canadian Oral History Association Annual Conference, Winnipeg (October 11, 1984).
15. For further information on these exhibits and research projects, contact the Provincial Museum of Alberta, Edmonton (Alberta Quilts and Domestic Kitchens); the Glenbow Museum, Calgary (Office Technology); and the Newfoundland Museum, St. John's (The Outport Cod Fishery).

- 8 "Concerning Work" Exhibit, Manitoba Museum of Man and Nature.
- 9 Order of the Eastern Star Regalia, 20th C.
- 10 Daughters and Maids of England Benevolent Society Ribbon, c. 1900.



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Photographs from the collection of the Manitoba Museum of Man and Nature.

Bibliography

- Cohen, Elizabeth A., "Embellishing a Life of Labor: An Interpretation of the Material Culture of American Working Class Homes, 1855-1915" in Thomas Schlereth, (ed.) *Material Culture Studies in America, The American Association for State and Local History* (Nashville, Tennessee, 1982) pp. 287-306.
- Cowan, Ruth Schwartz, "The 'Industrial Revolution' in the Home: Household Technology and Social Change in the Twentieth Century" in Thomas J. Schlereth, (ed.) *Material Culture Studies in America, The American Association for State and Local History* (Nashville, Tennessee, 1982) pp. 222-236.
- Laurence, Jill, "Setting The Record Straight With Women's Art Museum," *Toronto Globe and Mail* (January 1985).
- McGaw, Judith, "Women and the History of American Technology" in *Signs: Journal of Culture and Society*, Vol. 7, No. 4 (1982) pp. 798-828.
- McIntyre, John, "Artifacts as Sources for Material History Research" in *Material History Bulletin* 8 (Ottawa, 1977) pp. 71-76.
- Prystupa, Steve, "The Use of Artifacts in Cultural Research and Interpretation," unpublished paper (Winnipeg, 1979).
- Riley, Barbara, "Domestic Work, Oral History and Material Culture," a presentation to the Canadian Oral History Association Annual Conference (Winnipeg, October 11, 1985).
- Riley, Barbara, "Technology in the Home: Domestic Food Production in British Columbia, 1900-1930," a presentation to the "Women and Technology" session of the Canadian History of Science and Technology Association Conference (Kingston, Ontario, October 1983).
- Scott, Joan Wallach, "Women in History: Survey Article — The Modern Period," *Past and Present* 101 (November 1983) pp. 141-157.
- Schlereth, Thomas J., (ed.) *Material Culture Studies in America, The American Association for State and Local History* (Nashville, Tennessee, 1982).
- Schlereth, Thomas J., "Material Culture Studies in America: Notes Toward a Historical Perspective" in *Material History Bulletin* 8, papers from "Canada's Material History: A Forum" Ottawa, 1-3 March 1979 (Ottawa, 1979) pp. 89-98.
- Silverman, Eliane Leslau, "Writing Canadian Women's History, 1970-82: an Historical Analysis" in *Canadian Historical Review*, Vol. LXIII, No. 4 (December 1982) pp. 513-533.
- Wallace, Michael, "Visiting The Past: History Museums in the United States" in *Radical History Review* 25 (1981) pp. 63-96.
- Watt, Robert D., "Toward a Three-Dimensional View of the Canadian Past: Can Material History Take Us There?" in *Material History Bulletin* 8 (1979) pp. 27-129.

Regional Museums Plan

An interview with David McInnes by Tim Worth

David McInnes was appointed Heritage Resource Officer with the Historic Resources Branch of Manitoba Culture, Heritage and Recreation in November 1985. He is responsible for operating grants to community museums and for planning future support programs for museums. His thirteen-year career in museum work includes five years as a museums advisor in Manitoba, and six years as head of exhibits at the Saskatchewan Museum of Natural History in Regina where he was involved in exhibit production, policy development, and long-term planning. David has been active in museum associations at the provincial and national levels, and is a firm believer in planning as a valuable tool in any museum's development.

Tim Worth has been active in Manitoba's museum community for the past eleven years. A graduate of the Museum Technician Training Programme of the Manitoba Museum of Man and Nature, Tim has worked as Curator of Dalnavert in Winnipeg since 1975. He is a Past President of the Association of Manitoba Museums and a member of the Dawson and Hind Editorial Committee. He has served on a number of committees including the Canadian Conservation Institute's Regional Advisory Committee and the Training Committee of the Museum Technician Training Programme. He is currently the Chairman of the Gamings Fund Committee for the Manitoba Heritage Federation and is serving the A.M.M. as Chairman of its Standards Committee.



PHOTO BY BARRY HILLMAN

AMM: Since your appointment to the Historic Resources Branch, you have talked from time to time about a "Designated Museums Plan" or a "Regional/Theme Museum Network." Could you explain what you mean by these terms?

DAVID: These are really different names for the same idea, the idea that in Manitoba we have room for a new level of museum. If you look at museums as they are now, you will see there is a gap between what we recognize as the major museums (such as the Manitoba Museum of Man and Nature and the Ukrainian Cultural and Educational Centre) and the community museums that we could call "intermediate-level" museums in terms of their staff, building, and programs. At the moment, we don't have any way of recognizing the level of service that these museums provide to their communities. We would like to look at that and we would like to look at ways that we can help museums to reach out to their communities, schools, and even other museums.

AMM: Can you provide some background as to how this idea has come about?

DAVID: The idea itself has been around for quite a while. David Ross' 1974 study, *A Path for the Future*, talked about encouraging museums to take their services out to their communities and it raised the idea of district museums and grants to hire trained staff and so forth. Something similar was suggested by the Historic Resources Branch in 1978 but it depended on an assessment process and there was no agreement as to how museums would be assessed, so the idea was shelved. In 1983 our former Minister told the Association of Manitoba Museums that he was willing to look at a program of enhanced funding for "selected" museums. The Branch commissioned a study in 1985 to provide recommendations on how such a

system of museums might be set up.

AMM: What is your definition of these terms, "designated museum," "selected museum," and "regional/theme museum"?

DAVID: A "designated museum" is simply a museum that has gone through some sort of selection process, something along the same lines as the "good housekeeping seal of approval," although of course in museum terms. The term "regional/theme museum" came out of the 1985 study because it talked about museums which could serve their regions, museums which have themes that are important to Manitoba, and museums which do both — hence the hybrid term. If I had to pick one term, I would say that "regional museum" describes the idea best.

AMM: How do you plan to go about selecting these regional museums, and are you implying that there would be only one museum chosen from each region of the province?

DAVID: The selection process is the million-dollar question. Obviously not every one of our more than 120 community museums can be a regional museum. For starters, not every museum would want to be, but also there just isn't enough funding to support that kind of development. There has to be some way of deciding which museums will have the opportunity to become regional museums. I don't see the program being restricted to one museum per region. I expect that we will be looking at an upper limit of roughly twenty museums that might enter this program, which works out to an average of two or three museums per region. I want to see the program provide for an equitable distribution of regional museums around the province, but I think the quality and performance of the museums is going to be a strong factor in selection.

AMM: Are you talking about standards?

DAVID: Yes. That word has taken a beating the last ten years, but regardless of what you call them, museum standards have been around for a long time. When we talk about what a museum is and does, we're applying a form of standards because we're leaving out everyone who doesn't do those things. Whether we like it or not, standards are already part of a museum's existence. A museum has to meet certain standards to get a charitable tax number, it has to meet standards in order to be eligible for an operating grant. In fact, in Manitoba, there are two levels of operating grants based on two levels of standards. Standards are nothing new for museums, it's a matter of what standards to use and who decides.

AMM: Who will decide?

DAVID: In the past, it's been the government which has done most of the deciding. The existing grants program for museums, the Level I and Level II grants, were developed without a whole lot of input from the AMM, although the opportunity for consultation was certainly there. I don't think the AMM, at that time, felt it was ready to get heavily into museum standards. This isn't an unusual situation; for instance, the Canadian Museums Association is just starting to explore standards for museums, but where the museum community has been slow to get involved, government has inevitably taken the lead.

That isn't to say that government alone is responsible for setting standards. For instance, a museum in Manitoba must have a statement of purpose in order to be eligible for an operating grant. This requirement wasn't pulled out of thin air — museum people anywhere in the country will tell you how important a statement of purpose is for a museum. Government will always have a role in applying standards, but the museum community itself has an

Left: David McInnes, Heritage Resource Officer, Manitoba Culture, Heritage and Recreation; right, Tim Worth, Curator, Dalnavert.

important part in defining those standards. I find it very encouraging to see that the Canadian Museums Association has prepared a report on museum standards, and that the AMM has formed a Standards Committee of its own.

To answer your specific question, "who decides?", I feel that the regional museum idea needs the cooperation of both government and the museum community in order to succeed, so somebody representing both interests would presumably be formed to see this through. I expect the Manitoba Museum of Man and Nature is going to play a major role in this as well, so they should be represented.

AMM: What role do you see for the Manitoba Museum of Man and Nature in the network of regional museums?

DAVID: There are several possibilities. When I talked about museums reaching out to their communities and schools, some of that might be done with the help of the MMMN. For instance, the MMMN has a small travelling exhibit, *The Vikings*, which has gone to museums at Leaf Rapids, Killarney, Morden, and Gimli. If that sort of idea is worth continuing, then perhaps the regional museums could develop the space and the MMMN could provide the exhibits.

Regional museums might be able to get involved in more cooperative ventures with the Manitoba Museum of Man and Nature in developing and presenting school programs. For instance, the MMMN might produce "blank" school kits and the regional museums would develop the collections to fit. Another possibility would be for the regional museums to go to local schools using its own collections with education programs developed at MMMN.

And of course there would be an even greater need for the training and advisory services that the MMMN now provides. There may be other possibilities that we haven't even thought of yet.

AMM: What will be the role of the AMM?

DAVID: As far as I'm concerned, the Association speaks for all the museums in Manitoba, and the Council will obviously be a part of any discussions on museum standards and funding. Let me make it clear though that we want to avoid putting the AMM in any sort of compromising position with its members, so while we intend to look for advice from the AMM and others, the final decision on department programs and how they are implemented will rest with our Minister.

AMM: When do you expect the selection process to begin, and what kind of funding will be available under this program? Is this going to be a onetime-only grant or is the support to be ongoing?

DAVID: We are prepared to have the first museums selected by the summer of 1987, provided that all the parties involved in the planning can agree this summer on how the selection process will work. If we need more time to work that out, then obviously the actual selection will be a bit farther down the road. This is not a program in a hurry; if all goes well, our "selection" committee will approve a maximum of two museums a year for the next ten years.

As for funding, the province has two results in mind — giving selected museums the opportunity to be better at what museums do and giving them the opportunity to serve a regional, as opposed to a local, audience. We haven't settled on a figure for assisting with those activities but the amount of \$15,000 has been bandied about. This could be an annual ongoing operating grant which would continue as long as the museum maintains the standards expected of a regional museum.

AMM: That is considerably more than the \$3,500 maximum that is now available to Level II museums under the present program. What strings are attached to this new program?

DAVID: The strings are tied to standards and to agreed-upon performance

goals. Museums which apply to be in this program — and I want to emphasize that it is up to the museum as to whether or not it is involved — will have to meet standards which are above those that we now require for Level II museums. Once a museum is selected, it and the department will negotiate a contract for development over, for example, a three-year period. Both parties will understand what is expected and what is being provided. If at the end of that trial period the museum has met the agreed-upon goals, then it would become a full-fledged regional museum.

AMM: Is this a two-party agreement, i.e., museum and government, or will others be involved?

DAVID: I think that we would expect some commitment at the municipal level as well, although we haven't talked a great deal about what that might involve. A 1983 study of museums in Ontario suggested provincial-municipal agreements for museum support and that's worth looking at. The museum itself may also wish to deal with federal funding programs but that would be a matter between it and National Museums of Canada.

AMM: What do you expect to see as a result of this new program? What are the long-term benefits?

DAVID: At the end of the ten years, I hope to see twenty medium-sized museums which will bridge the gap between our large and small museums. The communities will benefit because these museums will be able to serve them better. Schools will benefit because the regional museums will have an increased ability to reach schools. Other museums in the region will benefit because they will have a local source of advice and encouragement. The AMM benefits because such museums means better service to museum visitors, whether local or tourist, and that means that we've all done a better job of helping people to understand and appreciate Manitoba's heritage.

Lighting and Conservation

QUESTIONS AND ANSWERS

By Rosalie Scott

Daylight and artificial lighting gradually damage many types of museum collections. Recognizing and dealing with harmful situations can help to lessen the damage to valuable collections. This series of questions and answers examines how light causes deterioration of artifacts and the methods which can be used to lessen damage.

How does light cause damage to artifacts?

Damage caused by light takes many forms, both visible and invisible. Examples of visible damage include yellowing of varnishes on paintings and furniture; bleaching, darkening, shrinkage, and splitting of wood; fading of dyes and pigments. Light also causes structural damage through the dessication and embrittlement of organic materials

such as paper, textiles, feathers, hair, and leather.

How are light levels measured?

Visible light is measured in the metric system as lux or in the Imperial system as foot candles (1 foot candle = 10.76 lux). Light can be accurately measured by using a lux meter such as the Gossen Pan Lux light meter or the Optikon light

meter.* These battery-operated devices consist of two components: a sensor which is held parallel to the face of the object and a meter from which the lux is calculated. When using a light meter, it is important that the sensor is always in full light and is not shadowed by a hand or body.

What are the recommended light levels?

Artifacts can be broken down into three groups: sensitive, moderately sensitive, and relatively insensitive to light. For materials sensitive to light, a maximum level of 50 lux is recommended. These materials include: paper and watercolours; parchment with sepia ink; textiles, especially silk; feathers; vegetable-dyed ethnographic materials; quill work, grasses, and dyed leather.

Rosalie Scott is a graduate of the Sir Sanford Fleming College course in Art Conservation Techniques. For the past year she has been a conservation intern in the laboratory of the Manitoba Museum of Man and Nature.

The maximum light level for materials moderately sensitive to light is 150 lux. Examples of these materials are oil paintings and organic materials other than the ones previously mentioned.

Materials relatively insensitive to damage from light — stone, metals, ceramics, and glass — can be exposed to maximum light levels of 1000 lux but 300 lux is recommended to prevent excessive contrast with more dimly lit artifacts. Although these light levels may first appear to be dim, they are adequate for perception and colour discrimination by the human eye.

How can light levels be reduced?

Light levels can be decreased by reducing the number of incandescent bulbs or fluorescent tubes. If the removal of a fluorescent tube causes a circuit break, a phantom tube may be installed to replace the original. Most fluorescent tubes operate in pairs and the removal of one will cause a circuit break. A phantom tube can be used to replace one of the pair, thereby completing the circuit and reducing the light level. Low voltage bulbs or fluorescent tubes

can also be used to lower light levels. The installation of dimmer switches is also recommended so that lighting can be adjusted for different displays.

Neutral density films can be used to reduce fluorescent light levels without changing colour quality. Diffusers can be either white translucent or colourless textured sheets of plexiglass. The neutral density film is a grey transparent sheet of plastic which can be installed on top of the diffuser panels. If necessary, displays can also be arranged so that the most light sensitive materials are located lower in the case and in the dimmest areas.

How long should artifacts be illuminated?

Since the amount of light damage is both a factor of light levels and time, it is possible to protect artifacts on display by reducing the time of illumination. Sensitive materials should be displayed for 3 to 6 months at most, then returned to storage for as long as possible. This period will not reverse the damage caused by light but it will help extend the period of time before damage becomes noticeable.

It is also possible to design display units with lights which are operated by

the viewer and thereby reduce the period of illumination, or to have tour guides turn on the lights when visitors arrive. Museums can also make sure no window light falls on artifacts during evening closing and winter closing.

How can the heating effect of incandescent light be reduced?

Incandescent illumination (floodlights, spotlights) can cause damage by heating. This heat damages some artifacts by drying out their organic components. Heat damage can be reduced by various methods: replacing spotlights with floodlights, increasing the distance between the light source and artifacts, lowering the wattage of the bulbs used.

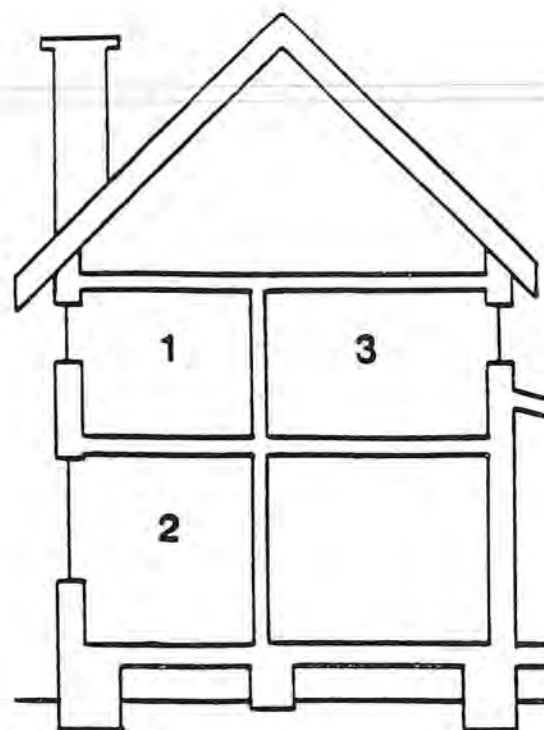
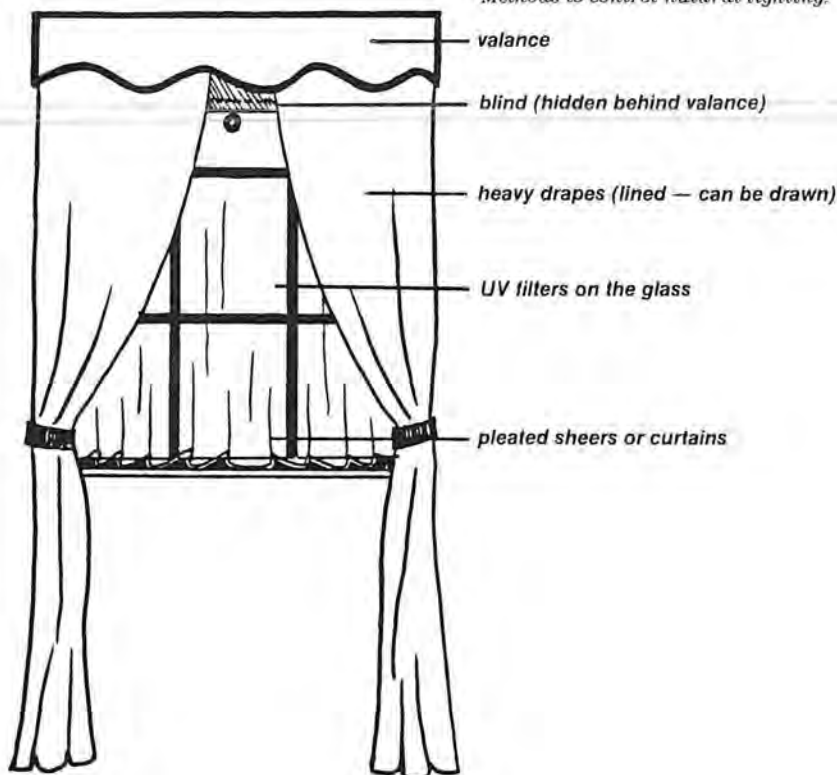
How are ultraviolet radiation levels measured?

Ultraviolet radiation is measured in microwatts per lumen (mw/l). By using a UV monitor, such as the Crawford UV meter, the UV radiation levels can be detected. This device consists of a small box-like case with a sensor located at the top. A dial on the front of the monitor is used to indicate the amount of UV radiation that is being emitted by a light source.

Diagram 1 courtesy of Ontario Ministry of Citizenship and Culture.

Diagram 1

Methods to control natural lighting.



Can artifacts be damaged by lights equipped with UV filters?

Ultraviolet filters only screen out the ultraviolet components of light, the most energetic and invisible portion of the spectrum. If the visible light is not controlled to the light levels specified, however, it will still cause deterioration.

How can light and UV radiation levels be reduced in historic buildings?

Because windows in historic structures are an integral part of the building, they must be dealt with carefully to preserve the aesthetic appearance of the building. Window blinds, which can be drawn, can be used to effectively block UV radiation while reducing visible light levels. These should be opaque and of good quality. Dark colours are particularly useful in blocking light. In some cases, blinds may even lend themselves to period settings.

Thick drapes, venetian blinds, louvres, densely pleated sheers, shutters or opaque curtains can be installed as an effective means of light control. Colours and styles can be chosen to combine historically and aesthetically with the

setting. The curtains and blinds should be lined with an opaque material.

If your museum is not an historic building, light can be eliminated by blocking out windows with painted plywood or other suitable materials. The window side of the blocking material can be painted black to eliminate an undesirable blank appearance.

Other less drastic measures can also be employed. A clear UV absorbing film can be applied to the inside of the window which will effectively control the ultraviolet component of light. Curtains, venetian blinds, louvres, or other opaque materials can also be installed as an effective means to control visible light. See Diagram 1.

How can artifacts be arranged in historic buildings in order to protect them?

Damage to sensitive artifacts in historic buildings can be reduced by placing the sensitive artifacts in rooms that are more dimly lit. In Diagram 2, four locations are shown in order of most to least preferable.

Similarly, the amount of light falling at points within a room is also a result of the location of the window. In Diagram 3, artifacts placed directly next

to window sills will fade quickly and be dried out by the heat. In contrast, those that receive reflected light from the walls facing the windows will be affected to a lesser extent. Artifacts located on the same wall as the windows will be provided with the most protection from light and UV radiation.

Summary

The purpose of a museum is to collect and preserve artifacts. To prolong the life of artifacts in museum collections, environmental conditions such as lights must be carefully controlled. Depending on the structure housing your collection, various methods can be utilized to reduce damage from light. Display lighting plays an important role in the deterioration of artifacts. By reducing light levels and utilizing UV filters, light damaging effects can be minimized. In this way the appearance and historic value of collections can be preserved.

*The Opticon light meter and Crawford UV meter are available on loan from the Manitoba Heritage Conservation Service. A list of suppliers may also be obtained from the MHCS, 190 Rupert Avenue, Winnipeg, Manitoba R3B 0N2 (Telephone: (204) 956-2830).

Diagram 2 and 3 courtesy of Canadian Conservation Institute.

Diagram 2

Rooms in a historic building receive different amounts of sunlight. In order of increasing risk of sunlight: (1) north rooms on the upper floors usually contain smaller windows; (2) north rooms, lower floor, usually have large windows; (3) south room, upper floor; (4) south room, lower floor, especially sun rooms.

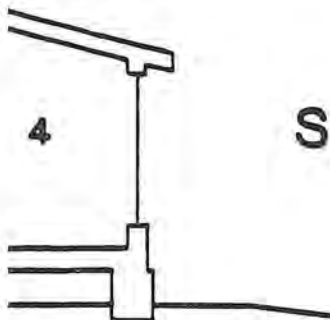
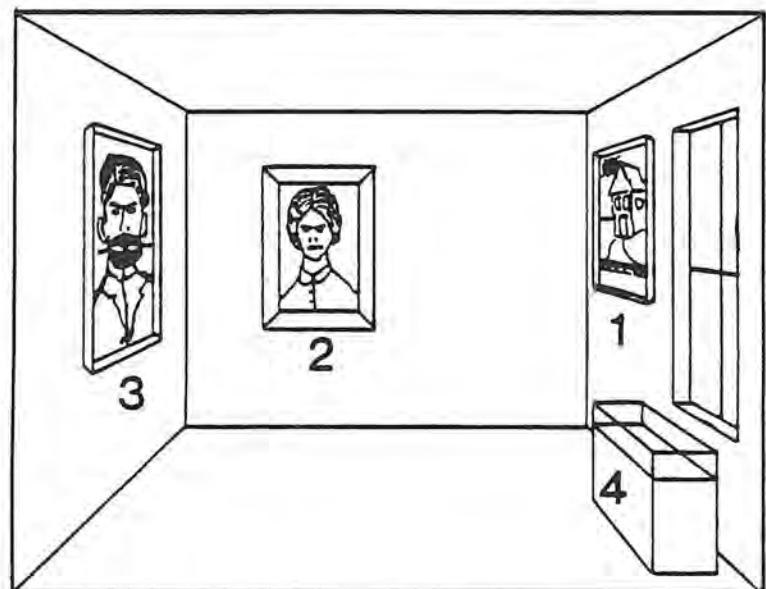


Diagram 3

Within any of the rooms shown in Diagram 2, some areas will be better than others. (1) The wall containing the window will be darkest; (2 and 3) walls opposite or adjacent to windows receive high amounts of scattered light in summer and direct sun in winter; (4) raised surfaces in front of windows receive direct sunlight almost all year round.



An Inexpensive Alternative to Track Lighting

By Barry Hillman

When museums and galleries consider a lighting method for their exhibit and display areas, the system most often chosen is track lighting. Track lighting is an electrical track onto which light fixtures can be attached and/or removed and reattached anywhere along the length of the track.

Without examining all the reasons why this lighting method is so popular, it is safe to say that track lighting allows considerable control and flexibility. Not only is it possible to move and focus light where it is required but, most importantly with track lighting, light levels can be varied. These factors make this lighting method desirable from both the display and conservation aspects.

For a museum or gallery operating on a limited budget, the major drawback of track lighting is the cost. There is, however, an inexpensive alternative to conventional track lighting. This system or method involves the use of clip-on/plug-in light fixtures, an electrical strip, and detachable electrical outlets (figure 1).

Although the use of clip-on lighting fixtures is not a new concept for community museums and small galleries, this method has not been used to any great extent because of the problem of installing a convenient power source. The power source for a plug-in light fixture is an electrical outlet which is normally installed in a fixed position on a wall. To enable a plug-in light fix-

ture to be used at ceiling level, extension cords are necessary unless an electrical outlet is installed on the ceiling. Even with an outlet on the ceiling, the use of extension cords is still required unless the light fixture is situated close to the outlet. The use of an electrical strip and detachable electrical outlet is the solution to this problem.

One such assembly presently on the market is being produced by I-T-E Busway Systems under the brand name "Electrostrip." Once the electrical strip is wired and mounted into place, the electrical outlet or receptacle (figure 2) is placed in the open position anywhere along the length of the strip and simply snapped shut to lock into place (figure 3). The outlet is now operational and ready to use.

Although the "Electrostrip" is normally mounted on a wall, it can also be installed on a ceiling. When installed on a ceiling, an electrical strip can serve the same function as an electrical track by providing a power source for light fixtures. The only difference in this situation is the means of connec-

Barry Hillman is Advisory Extension Officer, Advisory and Extension Services, Manitoba Museum of Man and Nature.

tion. With an "Electrostrip" a clip-on light plugs into an electrical outlet which has been plugged into an electrical strip, and with track lighting the fixture attaches directly onto the electrical track. (Clip-on light fixture arrangement: side view, figure 1; front view, figure 4.)

As stated earlier, this system of an electrical strip and detachable plugs is an inexpensive alternative to track lighting. At the time of writing, the approximate cost of the strip is \$.80 per foot. An eight-foot strip can be purchased at a fraction of the cost of an eight-foot track.

Technical Data

"Electrostrip" is a continuous, electrical, multi-outlet assembly, approved by the Canadian Standards Association (C.S.A.).

Strip Cost: approximately \$.80/ft.

Rated: 20 amperes, 125 volts AC, 3-wire
Outlet Receptacles: detachable, connect and lock into strip

Outlet Cost: approximately \$5/outlet
Electrical Strip Length: may be purchased in any length up to approximately 250 feet.

Supplier: electrical contractor

An electrical contractor can give an accurate estimate of your total hookup costs. In addition to the cost of the strip and plug there will be such items as wire, couplers, and caps.

Conservation Controls and Technical Details

Types of Lamps

In order to keep costs at a minimum the light fixtures should be very basic. For this reason, determining the maximum

wattage of the fixture is very important. For the light to be useful from a display aspect, the fixture should accept at least a 75-watt bulb, all the better if it can accept higher wattage. In a room of average height (8-10 feet) a 75-watt bulb (flood or spot) will be ideal from a display and conservation standpoint. Light fixtures can be purchased for \$10/20 fixture with bulb, depending upon style and features.

Dimmers

If it should be necessary to lower light levels further for conservation reasons, the "Electrostrip" can be wired to a dimmer switch. Attention should be paid to the dimmer's maximum wattage. If dimmers are being used, the electrical strip length should be no longer than 8-10 feet so as not to cause an electrical overload.

"Electrostrip" Length

Although the electrical strip may be purchased in lengths up to 250 feet, it is advisable to use it in shorter lengths of 8-10 feet. The shorter strip lengths will provide better control and flexibility for display and conservation purposes.

Comments

It would be foolhardy for me to suggest that the use of clip-on light fixtures should replace the use of track lighting. Track lighting is still one of the most flexible lighting systems for museums and galleries as it provides the user with many options such as specialized bulbs and fixtures not available with clip-on fixtures. However, for museums and galleries unable to afford a conventional track lighting system, the clip-on/plug-in system should be considered an option.

If you are interested in installing the clip-on method of lighting and require additional information or assistance, or would like to comment on this system, please contact Advisory and Extension Services, Manitoba Museum of Man and Nature, 190 Rupert Avenue, Winnipeg, Manitoba R3B 0N2.

Further Reading

K.J. McLeod, *Museum Lighting*, Technical Bulletin No. 2. Ottawa: Canadian Conservation Institute (CCI), National Museums of Canada, 1978.

Raymond H. Lafontaine, *Recommended Environmental Monitors for Museums, Archives and Art Galleries*, Technical Bulletin No. 3. Ottawa: Canadian Conservation Institute (CCI), National Museums of Canada, 1980.

Canadian Conservation Institute, *Track Lighting*, CCI Note No. 2/3. Ottawa: Canadian Conservation Institute, June 1983.

Canadian Conservation Institute, *CCI Environmental Monitoring Kit*, CCI Note No. 2/4. Ottawa: Canadian Conservation Institute, June 1983.*

*Monitoring equipment similar to that described in this article is now available on loan through Manitoba Heritage Conservation Service, 190 Rupert Avenue, Winnipeg, Manitoba R3B 0N2.

Figure 1

Side view of clip-on light fixture. The detachable electrical outlet locks into an electrical strip which is mounted onto a 3/4" right-angle wood arrangement. The wood provides a rigid support for the strip and a means of attaching the clip-on light fixture.

Ceiling

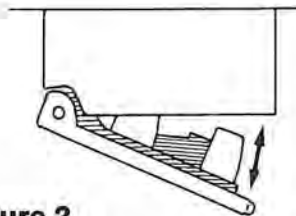
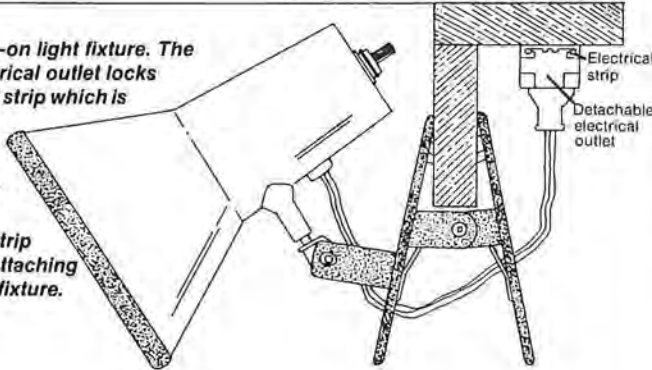


Figure 2

Detachables electrical outlet, side view, in open position.

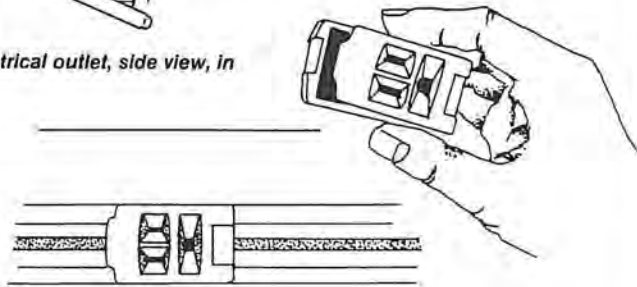


Figure 3

Electrical strip with outlet in place.

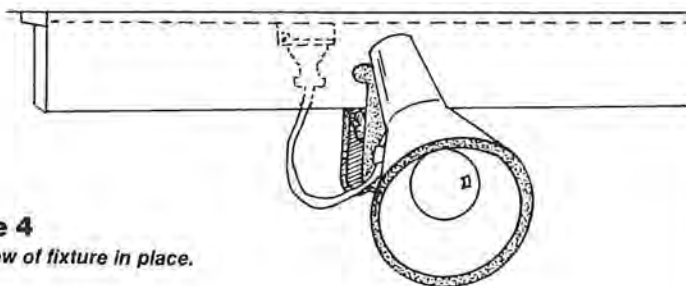


Figure 4

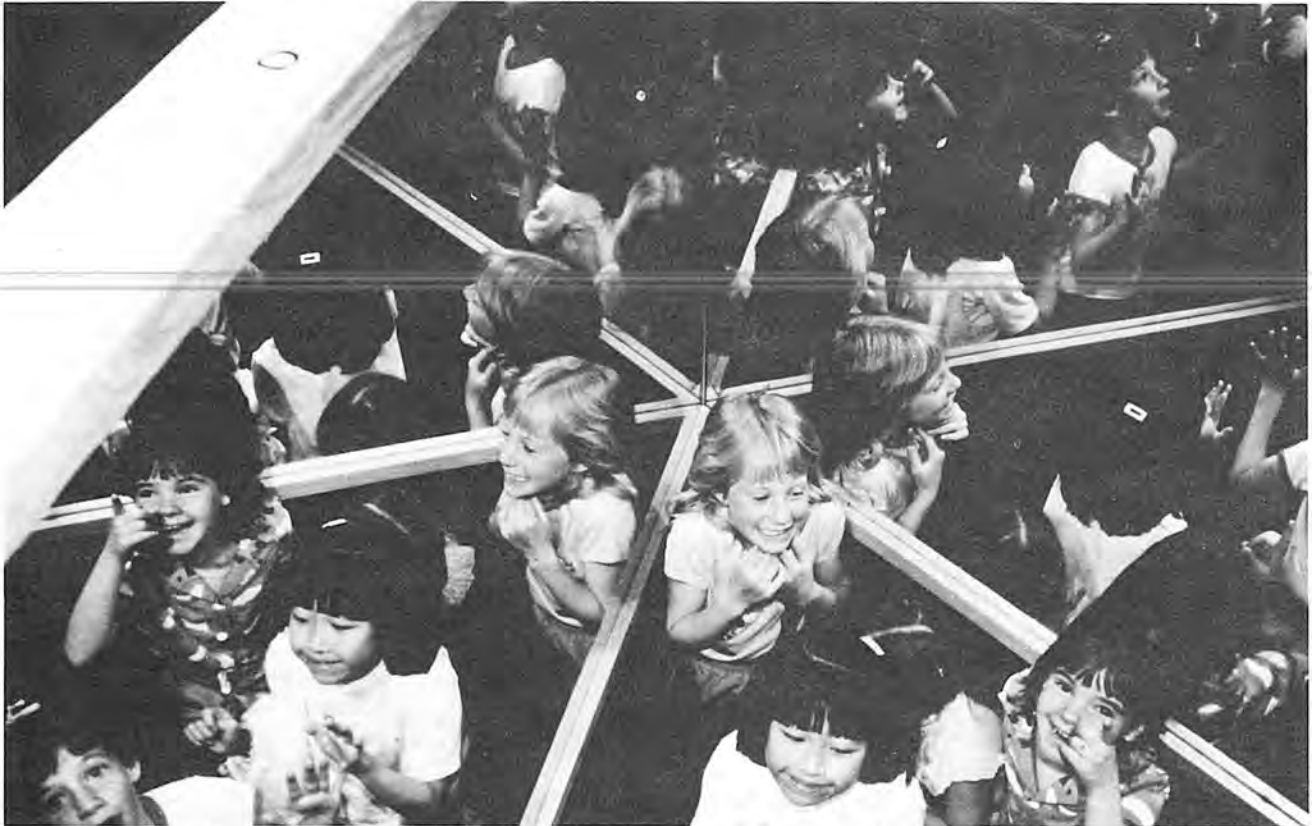
Front view of fixture in place.

TOUCH THE UNIVERSE A SCIENCE GALLERY

By Marion Bridges and Lesia Sianchuk

It was the kind of lineup usually reserved for tickets to see world-famous names or exhibits. Ten thousand people waited up to two hours to get a quick glimpse of Touch the Universe during the grand opening which coincided with the annual Manitoba Museum of Man and Nature Open House, May 10, 11, and 12, 1986. Most said it was well worth the wait and that they would do it again!

This dazzling new "hands-on" science gallery is a major attraction at the Manitoba Planetarium. Energy, motion, pattern, colour, and sound are among the phenomena portrayed in the sixty multi-dimensional exhibits and displays devised to lead the audience on an exciting voyage of discovery. The Touch the Universe gallery has two purposes: to illustrate scientific principles, and to develop enthusiasm for the exploration of each person's personal universe.



Duck-in Kaleidoscope: This triangular-shaped kaleidoscope allows you to see all sides of yourself at the same time.

Philosophy

The thoughts of man spring from his perception of the Universe around him. He senses, observes, tests, categorizes, and manipulates his environment. The philosophy behind *Touch the Universe* is, therefore, to provide the principles of science to the community by involving them in interactive displays where they can observe the scientific event and, where possible, experiment by changing the parameters to see the effect that this creates. The advantage of these kinds of exhibits over the strictly didactic exhibit are considerable. The person develops an intuitive grasp of the principle. This sense of discovery provides a sense of accomplishment, and this achievement becomes fun. We have attempted to connect the laws of science to everyday experience, and to show that the recognition of the patterns of our world is a human experience of man interacting with nature.

Planning

The development of *Touch the Universe* provided an opportunity to combine the Museum and the Planetarium under the "Man and Nature" theme. The science gallery links the astronomical experience in the Star Theatre with the history of humanity as represented in the Museum, to complement and enhance both themes. It is seen as an opportunity to provide our audience with a much greater depth of experience that we had previously. In September 1981 a committee was struck to investigate gallery development in the Planetarium area, and the idea for a "science centre-like" gallery came about. Information on other "science" galleries was gathered from visits to the Exploratorium and Lawrence Hall of Science in San Francisco, the Ontario Science Centre, the Franklin Institute, and the Science Museum of Virginia.

The displays best suited for the gallery environment were chosen, and the final theme is based upon using the five senses to discover the synthesis of science, technology, and the arts. Factors to be considered in the planning stages were varied but based primarily on the premise of informal learning; that is, that a somewhat random web of stored experiences, images, facts, and impressions add up to a body of accumulative knowledge that we continue to draw upon.

A number of the displays were purchased from the Ontario Science Centre with the advantage being that they were available instantly and with proven records of quality and performance. Many of the other exhibits were built "in-house" by a collaboration of designers, sculptors, carpenters, curators, machinists, welders, and electricians.

A major campaign was launched to support our plans and dreams for making this gallery a wonderful experience for visitors of all ages. Donations of specific materials and supplies to build the exhibits, as well as financial contributions, were and still are greatly appreciated.

Marion Bridges and Lesia Sianchuk are with the Communications Department, Manitoba Museum of Man and Nature.



PHOTO BY ROBERT BARROW

Mobile Organs; nose/mouth: *This is one of five oversized models of human sense organs that allows you to study the mechanics of the human sense organs.*

A Tour through "Touch the Universe"

The introductory area of *Touch the Universe* encourages you to discover yourself. It shows you how your body works, takes your heart rate, pulse, blood pressure, temperature, breathing rate and more. Oversized models of the human sense organs include an ear that allows you to study the mechanics of hearing, a hand that indicates what nerves are activated by pressure, cold, heat, and pain, and a working eye that lets you actually see how images are perceived.

The sight section, the gallery's largest, has many exhibits to challenge the limits of vision. "Refract Attack," an educational video game, allows you to shoot laser beams at space-

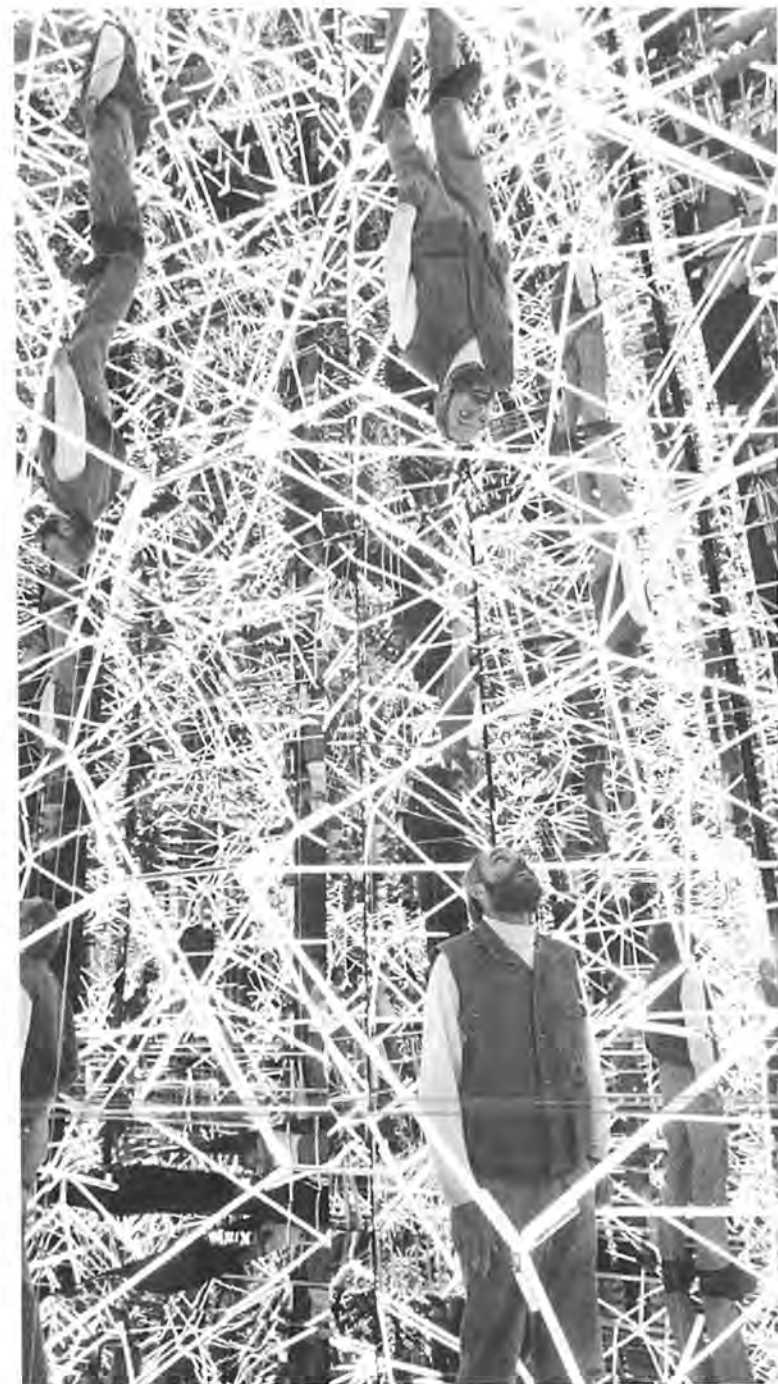


PHOTO BY IAN SWAN

Matrix: Walk into this room of infinity where mirrors, neon lights, and specially composed music transforms you into a space of no barriers.

craft through the various refractive surfaces of water, glass, or diamond. Have you ever wondered what you would look like with someone else's eyes or nose? "The Walrus," with its one-way mirror, lets you try on a few of your friend's features for size. Experience the illusion of seeing someone fly with the "Anti-Gravity Mirror," and try the gallery's "Cheshire Cat" exhibit where you can make someone slowly disappear like the Cheshire Cat in *Alice in Wonderland*.

The gallery's showpiece is the "Matrix," a participatory exhibit providing a reflective, electronically programmed sound and colour-charged environment for sensory exploration and discovery. Inside "Matrix," ordinary human perception is altered by the reflective surfaces and the participant is able to experience the infinite nature of the universe. The sensory effect that this has is impossible to describe, but ultimately proves that the physical, hands-on approach to scientific laws allows the participant to develop an intuitive grasp of the "infinity" principle.

Sound sensation exhibits include "Watchdog," the gallery's burglar alarm display which can detect even the slightest movement. "Faultless Jammin'" is a computerized guitar that allows you to harmonize with up to four other people. The "Artificial Larynx" shows the workings of a real human larynx and, if you feel lonely, you can converse with our "Talking Computer."

Explore the sense of touch in the "Tactile Room," a darkened environment of moving floors and curved, textured walls. The "Bed of Pins" exhibit allows you to manipulate over 165,000 pins to create designs and wave forms.

Experience the aesthetics of smell and taste sensations, and explore the working relationship between your nose and mouth. The "Ol Factory" exhibit tests your ability to identify specific aromas without visual clues. It's really much more difficult than you think.

Programs

A live demonstration area has been created to explore areas of general science, electricity and magnetism, holography, mechanics, sound and music. We offer school programs where these *Touch the Universe* demonstrations are vital in presenting an opportunity for firsthand interaction between the gallery, gallery staff, and the students. There are also professional development workshops for teachers on the principles of the hands-on science exhibits. As with our museum programs, the *Touch the Universe* school programs are also presented in French.

Admission and hours

Winter hours for the *Touch the Universe Gallery* are 10 a.m. to 8 p.m. Monday through Friday, and 12 Noon to 9 p.m. on Saturday, Sunday and Holidays. For science demonstration times, call 943-3142.

Admission price for adults is \$2.00, students \$1.50, senior/child under 12 \$1.50, school groups \$1.00 per student; members are admitted free. For program bookings and information call the Education department at 956-2830.

Discovering Your Community

*Activities and Suggestions for Developing
Local History Projects by Young People*

Prepared by The Young Ontario Committee,
The Ontario Historical Society, Willowdale.

Looseleaf

A recurring comment from community museum personnel on last year's *Dawson and Hind* "News and Information" sheet was, "Who's going to take over and keep this going; how do we get young people interested?" A publication of The Ontario Historical Society suggests some practical ideas.

Discovering Your Community: Activities and Suggestions for Developing Local History Projects for Young People is directed specifically to leaders of youth groups for those aged 6-16 and encourages extensive use of historical collections in community libraries, museums, and archives. It has been published in a looseleaf binder format to allow for the addition of new materials and the updating or revision of material.

The book is divided into eight chapters, each of which focuses on one aspect of local history. Each chapter is further divided into four sections: an introduction to the topic, five suggested activities accompanied by appropriate worksheets, ideas for additional activities, and a reading and resource list. The Resource Institution list, of course, utilizes primarily Ontario sources but 'Manitoba' (or any other province) can be substituted for the various historical and cultural community resources.

Discovering Your Community emphasizes the local history of individual communities and the use of local residents as resources. The topics and projects are designed to illustrate "history," starting with more familiar subjects and going on to perhaps less well known aspects of community life.

Chapter 1 focuses on "Family History" and provides a Family Tree Worksheet.

The local chapter of the Manitoba Genealogical Society is an obvious source of involvement. The second chapter, "Natural Environment," might involve a local naturalist or archaeologist as a resource person.

"Structures" (chap. 3) suggests a visit to a historical house and the comparison of 'then' and 'now' lifestyles and how living space has been used differently over time. A visit to a local museum's kitchen exhibit might be an activity to consider for chapter 4 on "Food," to learn how cooking methods, ingredients, and utensils have changed. Chapter 5 focuses on "Clothing" and suggests projects which will help develop an understanding of the specialized skills (cobbler, milliner, weaver, tailor) used to produce clothing before the advent of ready-to-wear.

"Artifacts" (chap. 6) proposes a visit with a museum curator to find out how a collection is assembled, researched, catalogued, readied and labelled for display. It introduces participants to identification and cataloguing methods, selection of a topic and then assembling an exhibit, and, just as importantly, arranging for it to be displayed.

Chapter 7, "Transportation and Communications," considers "Life without a Telephone." or a visit to an antique auto museum. "Crafts and Industries" (chap. 8) might involve a visit to a local farm, natural or historic site, or a survey of community services such as hospitals, libraries, or places of worship.

The importance of youth programming and education in the heritage field is well recognized. *Discovering*

Your Community provides a vast amount of material to draw upon, as well as an array of interesting topics that can be tailored to individual communities and community youth groups. The book is priced at \$25 and is available from The Ontario Historical Society, 5151 Yonge Street, Willowdale, Ontario M2N 5P5.

Marilyn de von Flindt
Editor, *Dawson and Hind*

Discovering Your Community is a resource manual prepared by the Young Ontario Committee of the Ontario Historical Society in 1984. The purpose of the manual as described in its introduction is "to interest young people in exploring the history of their community and to illustrate how they are contributing to its continuing heritage." What distinguishes this manual from other teaching aids is its flexibility, its *real* usefulness in program planning, and its relatively easy adaptation to areas other than Ontario.

Several of the activities are designed to suit the needs of small town and/or rural communities but are adaptable for the most part for application to an urban setting. Having used some of the activities in the manual for a Museum Day Camp for 9-12 year olds at the Manitoba Museum of Man and Nature, I am able to recommend those, namely, "Drawing a Family Tree" and "Identifying Places of Origin" from the "Family History" section, and parts of the "Structures" and "Artifacts" sections. This is one of the very few resources I have found that has activities not only

geared to museum-based learning but to children between the ages of 6 and 12 that actually work for that age group. Too often the activities designed for this group are either oversimplified or too complicated.

If it has a failing, the manual perhaps presupposes a level of knowledge on the part of the reader that may not exist. For example, in the "Structures" section, it assumes familiarity with building techniques and architectural terms. This failing, if it can be called that, is only critical if one is looking for

an "instant" resource, that is, one which does not require extra work at the time the activity is needed. I would rather have the writers err on behalf of intelligence, however, than to presume the reader incapable of thought or the ability to research a subject.

Perhaps a more serious criticism is that the manual does not effectively demonstrate how people are contributing to the "continuing heritage" of their communities. This is a difficult concept to illustrate, particularly in urban centres where there is a greater transience

of population and subsequently a lesser degree of connection, or at least perceived connection, to one's community.

These are, however, relatively minor criticisms in terms of the manual's usefulness. *Discovering Your Community*, for the most part I think, realizes its objectives and is certainly a valuable resource for museum programmers and educators.

Zora Simon
Public Programs Officer, *Manitoba Museum of Man and Nature*



Erratum

The photograph shown at left appeared incorrectly in *The Vikings: Reaching Out to Change the Stereotypes of These Outstanding Peoples*, Dawson and Hind, Vol. 12, No. 4, p. 12. We regret any inconvenience this may have caused the author or our readers.

Manitoba Focus

David Ross, Curator of Collections at **Lower Fort Garry National Historic Park**, is a member of the steering committee of a national special interest group for outdoor museums and historic sites which will apply for formal status within the CMA. The group will serve as a network to promote the exchange of information on a variety of issues related to the operation of outdoor museums and historic sites.

Communications will likely take the form of a newsletter or technical bulletin distributed several times a year, in addition to workshops, papers, or field trips. Anyone who wishes to be included on the mailing list or would like to contribute to the newsletter should contact John Fortier, Provincial Museum of Alberta, 12845 - 102nd Avenue, Edmonton, Alberta T5N 0M6. (from *Museogramme*, July 1986)

Terry Patterson, Curator of the **Transcona Regional History Museum**, has been nominated to an executive position at the inaugural meeting of a special interest group of representatives of small museums at the 1986 CMA annual conference. Three objectives were discussed: agreement that such a group is desirable; the definition of a small museum, to be determined at a later time from participant's suggestions; and the selection of officers who will communicate with its membership and the general museum community via such vehicles as *Museogramme*.

It was also proposed that a small museum group session, to be concurrent with other sessions, be included in the 1987 CMA annual conference which will be held in Winnipeg May 26-29, and that a special hospitality room be allocated for the group for the distribution of pamphlets, publications, etc. **David McInnes**, Heritage Resource Officer with **Manitoba Culture, Heritage and Recreation**, will assist in organizing the sessions, and Terry will serve as liaison with the CMA planning committee.

For further information, contact Claus Breede, Huron County Pioneer Museum, 110 North Street, Goderich, Ontario N7A 2T8. (from *Museogramme*, July 1986)

Beverly Ann Scott, President, Board of Governors, and **Dr. David Hemphill**, Executive Director, **Manitoba Museum of Man and Nature**, have announced a realignment of the Museum's senior administration which will enable the institution to provide better science and history programs and heritage services. Major objectives of the reorganization are the integration of museum and planetarium programming, a formal focus on community relations, and the implementation of a strategy for the future.

The new Directorates are: Director of Community Relations, **Robert J. Ballantyne** (formerly Planetarium Director); Director of Operations, **Thomas W. Nickle** (formerly Administrative Director); Director of Programs, Planning and Evaluation, **Joanne V. DiCosimo** (formerly Chief, Community Programs), and Director of Research and Collections, **Dr. Robert E. Wrigley** (formerly Museum Director).

Announcements from **Manitoba Culture, Heritage and Recreation** include the appointment of **Donna Dul** as Director of the Historic Resources Branch, **Thora Cartlidge** as Heritage Advisor for Public Education, and **Gail Perry** as Designations Officer for Historic Resources.

Lynne Easton, S.T.E.P. Student, conducted a survey of museum standards during July and August with on-site visits to 25 museums throughout the province. The information obtained will be used by the Department and the A.M.M. in assessing current levels of standards and developing funding for future programs.

Large Mammals, Volume 2, a story-colouring book written by **Dr. Robert Wrigley**, Director of Research and Collections at the Manitoba Museum of Man and Nature, has been awarded a gold medal by the Children's Book Center in Toronto for being one of the best children's books produced in Canada in 1985. The book contains dramatic stories, scientific facts, and sketches (with colouring instructions) of 21 large Canadian mammals by wildlife artist **Dwayne Harty**. Published by Hyperion Press of Winnipeg, it is the second in a series of eight nature publications designed for children six to twelve years of age. Volumes 1 and 2 are available in the Museum Bookstore for \$3.95 each.

Dr. Wrigley and Mr. Harty have also collaborated on **Mammals in North America: From Arctic Ocean to Tropical Rain Forest**, a book of stories, watercolour illustrations, maps, and a literature reference list. Also published by Hyperion Press, the 365-page book is available in the Museum Bookstore for \$49.95.

The **Association of Manitoba Archivists** has prepared *Living Archives: Using the Past Today* as a travelling exhibit to illustrate the importance of archival documents in our everyday lives. Funded by a grant from the Manitoba Heritage Federation, the display focuses on four areas of use. "Validating Land Entitlement" concentrates on government accountability and the legal use of archives. "Predictable Weather" uses the work of University of Winnipeg Geog-

rapher Tim Ball as an example of the importance of archives in scientific research. "Changing Times — Changing Buildings" demonstrates the use of archives in the restoration or renovation of buildings. "A Hundred Years of Patter-sons" shows that both government documents and private collections are used in tracing genealogies.

Facsimiles have been used in this exhibit because of the fragility of many of the original documents. Researchers and graphic artist Amy Lowe have worked closely to make the reproductions as much like the originals as possible.

The exhibit was designed to be accommodated in a small area such as a corridor, foyer, or the corner of a room. It comes in a compact package with instructions enclosed for setting it up.

Living Archives is available on loan to any interested organization. For information contact: Display Committee, Association of Manitoba Archivists, c/o Provincial Archives of Manitoba, 200 Vaughan Street, Winnipeg, Manitoba R3C 0V8.

Leaf Rapids Exhibition Centre has produced *Mushroom Mania*, a travelling exhibition of 35 photographs by **Mary West** of Leaf Rapids. The exhibit has travelled to ten communities in northern and western Manitoba, and was on display in the Urban Gallery, Manitoba Museum of Man and Nature, through October 1986. Funding was provided by Manitoba Culture, Heritage and Recreation for exhibit preparation. Funds for framing were provided by the Manitoba Arts Council, and shipping was donated by Gardewine North. The exhibit requires approximately 100 running feet of display space. For further information contact: Denise Desjarlais, Leaf Rapids Exhibition Centre, Leaf Rapids, Manitoba R0B 1W0.

The **Braddell Archaeological Collection**, part of a recent donation by **Dave and Irma Braddell** of Reston, Manitoba is on display in the **Manitoba Museum of Man and Nature** foyer. These items represent only a small portion of approximately 22,000 artifacts collected by the Braddells from some 200 sites, most in western Manitoba. Because of their attention to detail in record-keeping and site documentation, the items will provide valuable information to institutions and researchers across Canada through CHIN (Canadian Heritage Information Network), the nationwide heritage computer system centered at the National Museum in Ottawa.

The collection includes a variety of archaeological items spanning 10,000 years, as well as a particularly important historic peace pipe. The Kahkewaquonaby peace pipe is a beautiful silver and nickle-plated tomahawk pipe that was



COURTESY MANITOBA MUSEUM OF MAN & NATURE

Irma and Dave Braddell

presented to Reverend Peter Jones, missionary and Missis-sauga Ojibway half-breed, by Sir Augustus d'Este, a first cousin to Queen Victoria, while Jones was fundraising in Britain in 1838. The pipe was smoked to ratify an important peace treaty at the Grand Council of the Ojibways and Iroquois at Credit River in 1840.

For over a century the pipe's whereabouts was unknown. Mr. Braddell, working with Dr. Donald Smith of Calgary, was instrumental in eventually identifying the pipe which was held in the collection of Mr. Reg Campion of Pipestone, Manitoba.

Dave is a retired teacher in Reston, Manitoba and has been a major force in the development of the Reston and District Museum. He writes articles for local newspapers on wildlife and has been a contributor to *Dawson and Hind* for many years. Irma has taught crafts to adult and children's groups, a particular interest being traditional Indian crafts such as beadwork and decorating with plant seeds. The Braddells have indeed made a major contribution to the preservation and documentation of Manitoba's heritage.

The Manitoba museum community will be saddened to hear of the death of **Reverend Frank W. Armstrong**, the first president of the A.M.M. (1972) Inc.

Frank Armstrong was one of the many museum people present at the organizational meeting of the A.M.M. on 18 September 1971. He had been a founder of the St. James-Assiniboia Historical Museum as well as the Pioneer Citizens Association (sponsors of the reconstruction of Grant's Mill). At the first general meeting 20 October 1972 of the A.M.M., Frank was elected president of the new Association. Terms of office were one year at that time and during the next year as Past President he worked diligently to present the A.M.M. objectives to the provincial government. During that year, as the current president lived in Churchill, Frank was appointed Business Manager for the A.M.M., a position he held until 1977. In 1979 the A.M.M. council recommended him for a CMA Award of Merit.

Acting as advocate for the museum community, Frank worked with the Executive to bring issues before the provincial government. One of the hardest-fought was that of representation on and composition of a Museums Advisory Committee by the province. After several years, when the Committee was about to be formed, a change in government took place and the plan was dropped.

Frank Armstrong was born and raised in Melita, Manitoba and was ordained to the United Church in 1928. He served congregations in Pierson-Elva, The Pas, and Pipestone prior to becoming a chaplain in the Armed Forces during World War Two. Honourably discharged as a Major, he re-

turned to Brandon, and then to Winnipeg. At his retirement in 1968 he was Pastor at Kirkfield Park United.

Retirement did not end his community involvement. He was elected School Board Trustee, 1968-77, while also working with the museum community. On moving from Winnipeg in 1981 to be with his family in Edmonton, he was made an honorary citizen of Winnipeg.

The A.M.M. owes much to this fine, dedicated man who will hold a special place in our history.

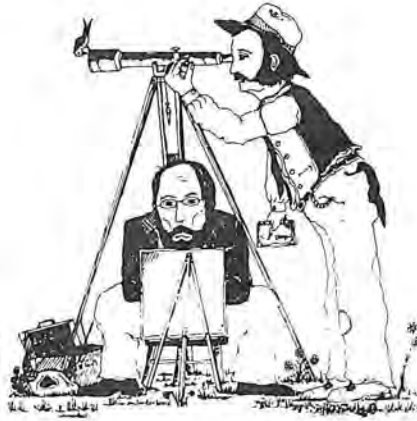
Terry Patterson



PHOTO COURTESY OF TERRY PATTERSON

Rev. F.W. Armstrong, far right, at the Third Annual Meeting and Seminar of the A.M.M., October 25-27, 1974, Swan River, Manitoba. Left to right: Bishop O. Robidoux, President; Mrs. Bea Saunderson, Councillor SW; John Dubreuil, Councillor N; and Rev. Armstrong

Notes to contributors



We invite you to submit articles for publication in *Dawson and Hind* in accordance with the following general guidelines:

1. Articles should be typed, double-spaced. Handwritten articles will be accepted only if they are legible and double-spaced.
2. Submissions for feature articles should be a minimum of four double-spaced pages, to a maximum of twenty double-spaced pages.
3. Museum Reports, Exhibit Reviews, and Book Reviews should be a minimum of two double-spaced pages.
4. We welcome photographs to complement articles. Black and white glossy prints are preferred. A list of captions and photo credits should accompany the submission. Photographs and illustrations will not be returned unless requested, in writing, by the contributor.
5. Tables, maps, and line drawings may be included provided they are of high quality to enable reproduction.
6. A brief biographical note (maximum 35 words) should accompany the submission.
7. Footnotes and bibliographies should include author, title, publisher, location and date of publication, and page references.
8. On matters of style, consult *The Chicago Manual of Style*, 13th ed., Chicago: University of Chicago Press.
9. Submission deadlines are January 15, May 15, and September 15.
10. Please address submissions and correspondence to The Editor, *Dawson and Hind*, 440 - 167 Lombard Avenue, Winnipeg, Manitoba R3B 0T6.

