



MARCH 1984



NOTES FROM THE EDITORS

Sharon Little-Ragusich and Gail Sundstrom-Niinimaa are retiring from their editorship of the Textile Conservation Newsletter-Canada, as of this issue of the Newsletter. Similarly the Centre de Conservation du Québec, Ministère des Affaires culturelles du Ouébec. which has so generously sustained the typing, printing and postage costs of the Newsletter, since its conception 3 years ago, will no longer be involved with its publication.

A similar type of editorship/publication has been established, in the aim of continuing the T.C.N.-C. Colleen Wilson, Textile Conservator of the B.C. Provincial Museum shall act as the "Western "editor, while Eva Burnham Chief, Textile Conservator and July Crawley, Assistant Textile Conservator, of the Canadian Conservation Institute, shall act as the " Eastern " editors. The Textiles Division of the C.C.I. has agreed to accept total responsibility for the publication of the T.C.N.-C.

Unfortunately, due to adverse economic conditions, it is now necessary that the T.C.N.-C. become self-funding. In view of this, everyone who is presently on the mailing list, shall soon receive an application form for subscription to the Newsletter, plus details regarding cost and new mailing addresses for the " West-East " submissions.

On commencing this sixth issue of the T.C.N.-C., In the meantime, indispensable treatments have while closing the initial era of the T.C.N.-C., been performed on a variety of ethnographic we wish to thank all individuals who have contributed information to the Newsletter. You have truly helped to sustain the notion of "informal communication". Your Newsletter has been a successful, valuable and interesting vehicle for information exchange in the Textile Conservation Field, reflected by the extent of its readership, which is quite impressive (total 203). It not only reaches out effective air filter, trapping considerable to Canadians but also to fellow collegues in the U.S.A., Europe, Latin America, Australia, India etc. Finally and most importantly, we

extend a special thanks to the readership. Your support in subscribing has kept the Newsletter, very much alive and your many letters of thanks have certainly helped to maintain the moral in good spirits.

Wishing the new Editors the very best.

Sharon Little-Ragusich Gail Sundstrom-Niinimaa

CURRENT PROJECTS/CONSERVATION TECHNIQUES

1/ B.C. Provincial Museum

1.1Colleen Wilson

1.1.1 B.C. Employment Situation

The past six months have been overshadowed by the political situation here. The government is still anxious to reduce the civil service but as yet the museum has not been badly affected. Of course rumours abound... The Conservation Division on the whole seems relatively secure. I have little seniority but have so far been spared, as I can only be " bumped " by another textile conservator employed by the B.C. government. Hopefully, this immunity will continue (finally a benefit from being over-specialized!) - if I go the position will be lost.

textiles.

1.1.2 Dance Screen

A painted Bella Coola dance screen was washed and patched. It had been displayed/stored on a large stretcher since its collection in 1913. During that time it had acted as a very quantities of oily soil. Because of the powdery nature of one of the paints, washing could not be too vigorous (two prolonged soaks with Lissapol NDB and very gentle sponging).

The screen remains in much worse condition than it ever reached during "active service". The tears were reinforced with dyed cotton couched in place with dyed hair silk.

1.1.3 <u>Smoking Cap</u>.

This is a very interesting adaptation. Made by an Athapascan, it is a Canadian version of a European gentleman's decorative smoking cap. The shape is formed by a cylinder of birch bark sewn together with stranded and spun sinew. The interior is lined with an indigo and white discharge printed cotton. The exterior is covered with a heavy black felted wool, decorated with glass and metal beads in elaborate floral patterns. The beads are strung on sinew but couched with red thread. The crown is covered with a black and brown twill wool, forming a vestigal flap at one side, reminiscent of a fez.

The birch bark was broken in two places and badly cupped. The black wool was moth damaged and the lining torn.

Acid-free two-ply card was slipped inside the lining against the birch bark, to re-establish the cylindrical shape. This was possible because of the split in the lining. It had been hoped to brace the exterior face of the bark similarly, but as that would have necessitated undoing original stitches, it was not attempted. Dyed black cotton was slipped behind the moth-eaten wool and couched with dyed hair silk using a curved needle. While not matching the intensity of the black wool, the colour of the cotton returned the focus to the beadwork. A covered styrofoam mount was made to maintain the shape during storage.

1.1.4 Chilkat Blankets.

Chilkat weaving in the Ethnology collection has been analyzed and described by Cheryl Samuel. Three blankets had been on display and consequently had been completely lined some years ago. The lining had to be removed to reveal almost half the back surface, which was interesting - windows had been left in the linings for constructional examination but they proved to be quite inadequate.

1.1.5 Future Projects

Future projects include the inspection of all textiles returning to the permanent "History " and "Ethnology "galleries. These were dismantled in October for removal of asbestos and installation of better fire protection and ventilation equipment.

The department as a whole is working on a Disaster Plan in anticipation of a Disaster Planning Seminar in August/September. Those interested should contact: Greg Evans/ Museums Advisors Office/B.C.Provincial Museum.

1.2 Barbara Kennedy

1.2.1 <u>A Small Vacuum System for the</u> Conservation Laboratory

Vacuuming objects and textiles in Conservation is sometimes difficult with domestic or industrial equipment because it is large, awkward and too noisy for lengthy cleaning procedures.

It is also difficult to recover the collected debris from a vacuum cleaner bag for identification or analysis. There is, however, scientific equipment available which may be used in the conservation lab. The 'zone collector' traditionally used in chromatography, consists of two cylindrical sections of pyrex fitted together with ground joints. An extraction thimble fits over an inner cone to collect the debris. The unit is 23 cm. long, light-weight and silent (if the vacuum pump is located away from the work area) with the amount of suction easily controlled at the bench outlet. Zone collectors have always been standard equipment at the B.C. Provincial Museum, but after loss through breakage of several collectors, it was discovered that the instrumentation for chromatography had changed and supply houses were no longer offering them.

It is possible to have them custom-made however, at no great cost. Most university chemistry departments have glass blowers on staff who will make equipment to specification. Materials required are two 45-50 glass sockets, one outer and one inner, each with ground joints. With heat, the end of the inner socket is shaped into a long open-ended snout, the end of the outer socket is rounded and closed, and a small opening is provided to which the rubber vacuum line is attached. A hooked node in glass is formed on each of the two halves over which a spring can be looped to hold the two pieces together. Extraction thimbles made from cotton cellulose fit over the interior tapered end of the inner socket and are re-usable. The cost of a custom- B.C. Provincial Museum made zone collector made recently at the University of Victoria was about \$30 (\$20 for materials, \$10 for labour). This is still far cheaper than the 1981 list price of \$70.00 for a manufactured zone collector. Extraction thimbles (33 X 80 X 1 mm) are available from scientific supply houses for about \$2 each and come 25 to the package.



Illustrations by Maggie Graham-Bell

For further information contact:

Barbara Kennedy 675 Belleville Street Victoria, B.C. Canada V8S 1W6

2./ Canadian Conservation Institute

2.1 <u>Washing a Beaded Flapper Dress</u>

The washing, of a beaded silk georgette flapper dress, presented an interesting challenge. A wet-cleaning treatment was necessary because of numerous stains on the piece.

The silk georgette fabric was extensively decorated with beads. Once the piece was immersed in water the weight of the beads on the fragile silk would be considerable; it was necessary therefore, to construct a support for the dress that could be used for washing and later during the blocking out procedure. Corex was chosen to provide a lightweight but strong support.

An outline of the dress was sketched on to the Corex board. The support was then cut out and inserted in the dress and checked for accurate



dimensions. To avoid any sharp edges, a strip of Microfoam was basted to the perimeter of the Corex. At the neckline, two holes were made in the Corex support, for linen tape straps, to be used later to suspend the support and the dress during the drying procedure.

When the piece was ready to be washed, the Corex support was inserted into the dress which was then laid in the sink on another . larger sheet of Corex. After one side of the dress had been washed and rinsed, a further sheet of Corex was placed over it, thus sandwiching it between the two layers of board. This allowed us to turn the dress over safely to wash the reverse side.

After rinsing, excess water was blotted from the dress with pads of absorbent towelling. The board, still supporting the dress, was hung by the linen tape straps from a stand. Fans were then used to dry the dress quickly.

2.2 Micmac Chief's Costume

During the past 18 months, the Textile Division of the Canadian Conservation Institute has been involved in the conservation of a unique 1841 Micmac chief's costume. The ensemble is known as the O'Halloran Costume and was purchased at auction in England for the express purpose of repatriation. The costume's name is derived from the British military officer, to whom it was presented by a tribe of Micmac Indians, when they made him a chief and father of the tribe, in gratitude for his friendship. The costume remained in the O'Halloran family until it went to auction and is therefore complete.

traditional mitred hood, two cloth pouches, fur will further contribute to extending the life pouch, moccasins, leggings, knife and sheath. and pipe, plus two Presentation parchments. Each of the textile pieces and one parchment are decorated with extensive beadwork and silk appliqué. The larger textile pieces are silk lined, with cotton batting inserted, to achieve various design and structural effects.

In addition to the problems associated with old wool and silk, this costume represented another challenge. Four colours of beads, used extensively over the whole costume, exhibited severe fracturing indicative of "glass disease". The challenge was to stabilize the affected beadwork without altering the design elements and to develop a safe environment for display.

The affected beadwork was cleaned with ethanol and coated with a 5% polyvinyl butyral solution (Mowital B-30 in ethanol). This solution was chosen for its consolidating properties (based on work done in the Ethnology Division of the CCI). Needless to say, this painstaking treatment was accomplished with the aid of a microscope.

As it is essential (because of the glass disease) that the costume should not endure humidities in excess of 40% for an extended period of time and also desirable (from a thematic viewpoint) to display all the pieces of the costume together, a silica gel controlled case will house the exhibit. This solution represents the best possible compromise in view of the various materials and levels of deterioration involved, plus the practical factors associated with the maintenance of a specialized display environment. The case will be RH controlled in the 20-30% range. This range will not, to the best of our current knowledge, unduly aggravate the deterioration of the beads, the wool and silk textiles or a consolidated parchment. At the same time, it is a desirable range from the point of view of ageing of textiles and pigments and a practical one for continuous case maintenance. Limited exterior lighting (illumination provided through diffusing The ensemble includes a military style coat and systems) controlled by an exterior time switch of this National Heritage ensemble. The costume is scheduled to be on exhibit at the Provincial Museum of Nova Scotia, in Halifax, by the summer of 1984.

2.3 Micmac Cradle

The assistance of the Textile Division at CCI, was enlisted for the conservation treatment of the lining of a Micmac quillwork cradle, being treated in the Ethnology Division.

The crimson velvet lining was in a very deteriorated state and extremely brittle. The fabric had split in many areas, exposing the fleece batting underneath.

Two small, inconspicuous areas were chosen to see if it would be possible to secure them by stitching. Silk fabric, dyed to match the lining fabric, was carefully inserted behind the split areas. Then loose threads were realigned and couching was attempted in hair silk thread. This proved to be a most satisfactory method of securing the weak areas.

It was possible, by this method, to treat the lining in-situ.i.e. removal of the original tacks securing the lining to the cradle around the rim, was not necessary.

2.4 Textile Laboratory Intern Report

During my one-month internship in the Textile Division of the Canadian Conservation Institute in October1983, I worked on two interesting pieces. The first one was a linen curtain with intricate embroidery designs of flowers, animals and birds. Each motif was outlined in raised satin stitch; the animals, birds and blossoms were embroidered in cut openwork, the "punto tagliato". The open spaces were filled in with a variety of crochet stitches, thus creating transparent areas. The abstract designs were executed in ""handanger" or the drawn openwork of kloster blocks joined by crochet stitches. The curtain was stained by water and yellowed by light. The treatment consisted of careful washing and blocking dry of the piece, as well as stabilizing of the degraded areas, by couching them to a fine piece of new linen. It was very satisfying to see this piece recover its beauty.

The second piece that I worked on during my internship, was a nine patch presentation quilt in white and red cotton. There were ink signatures on most of the white pattern pieces. The acids in the irongall inks used in some of the writing caused the degradation of the cellulose fibers. Fortunately most of the signatures were faded but did not damage the cotton. The treatment of this piece was also very gratifying as the quilt looked much brighter after gentle washing and blocking dry.

I enjoyed the short time which I spent at the CCI very much. Not only did I gain new knowledge and experience, but I also have met some wonderful people.

Eva Kaczkowski Rocky Mountain Regional Conservation Center 2420 South University Blvd. Denver, Colorado U.S.A. 80208

3./ CENTRE DE CONSERVATION DU QUEBEC -

Sharon Little-Ragusich

3.1 Professional Development

As part of the Professional Exchange Programme between the Quebec Government and the Service culturel Scientifique et Cooperation Technique, of the Gouvernment of France, Sharon Little-Ragusich spent six weeks during the period of November 1 -December 23, 1983, studying at the Manufactures Nationales des Gobelins et de Beauvais, Paris. Most of the time was spent on the revision and perfection of various tapestry techniques, utilized by the "Gobelins" both from historic and contemporay perspectives. A few days were also spent working in their dye workshop. Many associated institutions, museums etc. were visited notably: Institut Français de Restauration des Oeuvres d'Art, Paris; Manufacture d'Impression sur Etoffes, Ribeauville; Bucol S.A. Lyon; Tasinari-Chatel, Lyon; Musée Historique des Tissus, Lyon.

With the assistance of the Canadian Museums Associations Bursary Programme, Textile conservation facilities and associated museums were visited in England and Switzerland. during the above mentioned time period. The focal point of the visits concerned the various techniques of tapestry conservation/ restauration and their accompanying equipment. These visits also provided excellent opportunities to discuss the many aspects of textile conservation in general. Textile conservation facilities visited included: The Textile **Conservation Centre Limited, Hampton Court** Palace; Osterly Park House, Osterly; Victoria and Albert Museum, London; Abegg-Stiftung, Bern.

3.2 Emergency Treatment for Mold Growth

In early February 1984, a collection of 80 textiles from La Fabrique de la paroisse Notre-Dame-de-Québec, was given an emergency treatment for mold growth. Part of this collection, which was comprised of copes, chasubles, dalmatics and respective accessories, had originally been ordered by King Louis XIV of France, in the early 1700's, for " La Nouvelle France ". The richly woven silk and velour fabrics comprising this particular part of the collection, were handsomely endowed with gold and silver threads. The coat of arms of Louis XIV had also been heavily embroidered and stitched to each costume.

The textiles had been stored, for some time, in a vault at the Cathedral Notre-Dame-de-Québec. Unfortunately, a small area of a barred window, located on the exterior wall of the vault, had been left open, exposing the interior of the vault and its contents directly to the external weather conditions. Similarly, this outside wall of the vault had not been insulated, hence over all the surfaces of each textile, several exposing the wooden storage cabinets (housing the textiles) located in close proximity to

this wall, to excessive humidity levels. The mold growth, of assorted colours of white, yellow and black had become so predominately thick on several areas of the textiles, that it was not possible to distinguish the details of certain heavily embroidered areas i.e. the coat of arms of King Louis \overline{XIV} .

For the purposes of conducting an emergency treatment for the complete collection, the textiles were relocated to a large laundry room at the Soeurs de la Charité de Québec, as the Cathedral Notre-Dame-de-Québec was under complete renovation, in preparation for the festivities of the 450th aniversary of the arrival of Jacques Cartier, summer 1984 and the arrival of the Pope in September 1984; the risk of infecting the Centre de Conservation du Québec and the collections stored in its close proximity, from the Musée du Québec and Mise en Valeur des Collections Ethnographiques, was potentially very dangerous.

The laundry room, located above ground, provided excellent facilities for this type of treatment: it was very spacious, with a high ceiling; large windows provided good natural lighting and plenty of fresh air; the warm temperature kept the air relatively dry; table and counter tops provided good working areas: coat racks were provided for the hanging of the many costumes.

Three sisters, in their enthusiasm to help rectify the situation, offered their assistance. For health purposes, the room was kept closed from the remainder of the building and all individuals working on the textiles were clothed in lab coats, plastic gloves and respiratory face masks.

As the textiles were still very humid, they were initially hung and/or unfolded, respectively on the coat racks, tables, counters etc. Once dry, a small vacuum cleaner was passed times, to remove as much as possible, the mold growth and the presence of black soot-like

dust. In some cases the mold growth had become so encrusted in the fabric, that a small stiff brush was used to assist in its removal.

Following the removal of a substancial amount of the mold growth, a fine mist of "Lysol" was sprayed about each textile, as an extra precaution in preventing an immediate reoccurrence of mold growth. As a strong "moldy odour" was still prevalent, the textile accessories were placed in low, open-faced acid-free boxes and most of the costumes were suspended, for aeration purposes. As many of the costumes were of the dalmatic style, wooden dowels 3.5 cm in diameter were covered with mylar and passed under the sleeve and neck areas horizontally, thus rendering full support to these already weakened areas, while allowing the costume to be fully supported along its largest width thus permitting the fabrics to hang flatly. Each dowel was suspended through the use of a cord, wrapped about the central area of the dowel and then about the horizontal The colour standards, which may be easily bar of the coat rack, the two looped ends of the cord being secured with an "S-hook". This particular manner of suspending the costumes was quickly and inexpensively installed.

Samples of the mold growth were briefly examined by Dr. B.M. Olah, département de phytologie, Université Laval. Photographs taken, using the electron microscope, depicted many types of mold, including bacteria. To date, further treatment of a more thourough manner, has not yet been determined. For the moment, the emphasis is on maintaining the textiles in an isolated area of controlled environmental conditions, so that the mold contamination is not reactivated.

3.3 Classification of Dye Recipes

In the aim of reducing the subjective classification of fabrics/fibres dyed with synthetic Sandoz dyes, the Textile Conservation Laboratory of the Centre de Conservation du Québec, is using the Munsell system of colour notation, included surface cleaning of porcelaine faces,

for the classification purposes of its dye recipes.

A standardized size of fabric/fibre sample which shall be attached to its appropriate recipe card, is referred to the Munsell Book of Colour, Glossy Finish Collection, under standardized lighting conditions of the Textile Conservation Laboratory. The collection of colours, composing 2 loose leaf volumes "displays approximately 1500 color standards arranged in slots on charts for forty different Hues. Each constant hue chart is printed with a Value/Chroma grid and labeled with its hue notation. The color standards, individually mounted on white paperboard printed with complete Munsell notation, are arranged in the appropriate V/C position on each chart as indicated by the vertical and horizontal scales printed thereon ... the notation for a sample of "rose" might be 5R 5/4" and would be inscribed on the recipe card.

removed from their slots, have also proven to be useful in the comparison/selection of coloured fabrics for exhibition cases; the purchase of a particular fabric on store location; the selection of a specific shade of stain for a new wooden frame etc. For further information contact: Munsell Color 2441 North Calvert Street Baltimore, Maryland U.S.A. 21218 Tel: (301) 243-2171

Glenbow Museum - Gail Sundstrom-Niinimaa

4.1 Doll Exhibition

The Textile Conservation Lab at Glenbow was busy in November and December working on the conservation of 200 dolls for a doll exhibition. Most of the work was superficial and

rearrangement and curling of doll's hair. Some dolls required more complex work, including repair of broken fingers, legs and washing of the doll's clothing. As a follow up to this exhibition, the rest of the doll collection will be evaluated and conservation work will be continued on the collection as time permits.

4.2 Metis Exhibition

The Metis exhibition, which is scheduled to open in 1985, contains some textile items which require conservation and mount construction. It is anticipated that 20 mannequins will be made this summer, using Colleen Wilson's "Body Building" (TCNC Sept. 1982 issue) method.

4.3 Brussels Tapestry

A Brussels tapestry, circa 1700, has recently been donated to the Glenbow Museum. It is very dirty, after having been hung in a log cabin in Alberta, for part of its life. It will be the project of the Textile Lab to wash it and prepare it for relining. The tapestry measures 200 cm x 340 cm and has wool warps and silk and wool wefts. (The tapestry was washed at the University of Alberta on March 23, 1984, with the help of Nancy Kerr's Textile Conservation Class.)

/ Provincial Museum of Alberta

5.1 Children's Costume

"Changing Views of Children" is a children's costume exhibition scheduled to open at the Provincial Museum of Alberta on April 2, 1984, until October 15, 1984. The exhibition work is being prepared by Jose Loonen. The exhibit will include 7 children's costumes from the 1890's to the 1920's. A slide show will be incorporated in the exhibition as well. A preview case showing a reproduction of one of the costumes is already on display in the museum's lobby.

In addition to making the reproduction, Jose

Loonen completed the research on children's costumes which was started by Janice Cass (a practicum student from the Clothing and Textiles Department of the University of Alberta). Jose chose the costumes through consideration of the amount of conservation work required on each one. She then did the conservation work after consultation with Elizabeth Richards of the Clothing and Textiles Dep't. of the University of Alberta. Mannequins were constructed for each costume, by carving polystyrene discs and padding them with fabric. Problems were encountered because children's mannequins had never been made before at the museum. Jose therefore did some research on children's body shapes before making the mannequins. The exhibition is being curated by Sandra Morton, Curator of Social History, PMA.

5.2 History of Alberta Quilts

Marijke Kerkhoven and Dagmar Reiss are currently doing conservation work and devising a support system for the Alberta Quilts Exhibition. This exhibition is being curated by Sandra Morton, Curator of Social History at the Provincial Museum of Alberta in Edmonton and Elyse Eliot-Los, Director/ Curator of the Muttart Gallery in Calgary. Marijke and Dagmar are repairing and consolidating the damage on some of the older and well used quilts.

They are also devising a support system for the exhibition of heavy textiles. They aim toward a system that not only gives adequate support to the textiles, some of which are very heavy, but that is also easy to assemble and disassemble and that will provide safe transportation of the artifacts between venues, as this will be a travelling exhibition.

The exhibition is scheduled to open at the Muttart Gallery in Calgary September 11, 1984. It will also be shown at the Prairie Gallery in Grande Prairie December 1984 to January 1985, at the Red Deer Museum in February and March 1985, at the Galt Museum in Lethbridge in April and the beginning of May and winding up at the Provincial Museum of Alberta in Edmonton in June-July of 1985. The exhibition may travel nationally after that time, pending additional funding.

6./ University of Alberta,

Dept. of Clothing & Textiles

- 6.1 <u>Some Current Graduate Research</u> (Note: these are working titles only)
- 6.1.1 " Visiter Response to Four CostumeDisplay Forms in a Museum Exhibit. " Janine Andrews (Anne Lambert, Nelma Fetterman)
- 6.1.2 " Buffering Agents and Cellulosic Textiles " Teena Jennings (Nancy Kerr, Elizabeth Richards)
- 6.1.3 " Fire Retardant Finishes for Contemporay Fibre Art ' A Conservation Perspective " Doreen Rockliff (Nancy Kerr, Anne Lambert)
- 6.1.4 " Use of Replication Costumes in Museum
 Programmes for Children "
 Karen Wells (Anne Lambert)
- 6.1.5 " Nineteenth Century Womens Bodices: Considerations for Replication, Reproduction and Reconstruction " Sheila Sinnot (Anne Lambert)
- 6.1.6 " Textiles in Early Alberta Agricultural Fairs " Marijke Kerkhoven (Anne Lambert, Marlene Cox-Bishop)
- 6.1.7 " Dressmakers in Edmonton 1900-1930 " Dianne Smith (Anne Lambert)
- 6.1.8 " Information Retrieval Systems for the University of Alberta Historic Costume

and Textile Study Collection " Roslyn Feniak-Madrid (Anne Lambert, Nelma Fetterman)

SUPPLY SOURCES

Dye Equipment

Research into dyeing operations has been a continuing project in the Textile Division at the CCI for the past two years. We are now at the point where our procedures are established and we have a regular supplier of Ciba-Geigy dyes. Our only drawback at this point is the length of time involved in conducting the dye bath. We are now looking forward to receiving a " Launder-Ometer " dyeing machine, manufactured by J.B. Atlas Company, Ltd., in Rexdale, Ontario. This apparatus has four arms, each holding five containers, which revolve in a tank containing a water bath. The machine can be programmed for temperature control, rate of temperature increase, and time duration. As such, it provides for the dyeing of large numbers of samples of fabric/braids, without the need for the constant attention of the operator. Dye baths for lengths of fabric, chosen from the samples already prepared, will continue to be performed manually.

The acquisition of this piece of equipment rounds out dyeing operations in our Division. We shall keep you up-to-date regarding the Launder-Ometer's performance.

Microscope-" OPMI 99 "

One of the latest equipment acquisitions at the Textile Conservation Laboratory of the Centre de Conservation du Québec, has been the " OPMI 99 " microscope, manufactured by Carl Zeiss of West Germany. Designed specifically for the medical profession, for situations requiring effective and efficient manoeuvring, at awkward angles, it has proven to be extremely useful for certain textile

conservation analyses and treatments. Its extendable arm (of varying lengths) and fully rotating joints, permit conservation treatment Territorial Seed Company over wide surface areas. Various types of accessories permit easy attachment of the microscope to a wall, table and movable stand, U.S.A. depending on the type of work required. Due to 97451 its light weight, it may even be packed into its specially made travelling case, if conser- The Reemay comes in 67" width and weighs 1 lb. vation field work is necessitated.



Contact:

Carl Zeiss Canada Ltd/ltee 45 Valleybrook Drive Don Mills, Ontario Canada M3B 2S6 Tel: (416) 449-4660

Reemay Spun Polyester

Besides its numerous uses as a conservation material Reemay Spun Polyester has recently been documented in a seed catalogue where it was praised as it: " accelerates growth, hastens maturity, defeats cabbage fly, carrot rust fly, leaf miner ".

Contact:

P.O. Box 27 Lorane, Oregan

per 100 linear feet.

10ft. - \$3.00 50ft. - \$10.00 2,550ft. (501bs.) - \$250.00 carton (4 rolls) - \$230.00/roll

" Free sample and complete information pack available on request ".

Re: B.C. Provincial Museum Colleen Wilson

PROFESSIONAL SERVICES

Dyeing of Fabric and Yarn

The following company will dye small quantities of fabric and yarn to order:

Kimtex Services Lab P.O. Box 823 Haledon, N.J. U.S.A. 07538 Tel: (201) 790-6998

Re: Mr. Johansen, T.C.G.N., Vol.V1, No.2, p.2.

HEALTH AND SAFETY

Fumigation at the B.C. Provincial Museum

David Hillman

This report has been written in response to the several enquiries we have had recently concerning our current fumigation policy and the

reasons which led us to discontinue indefinitely the use of ethylene oxide (EtO) as a museum fumigant.

Prior to 1979, we were using Dowfume EB-5 (ethylene dibromide, ethylene dichloride and carbon tetrachloride) to fumigate the collections. Its primary commercial use was as a grain fumigant until banned by the government because of the carbon tetrachloride content. From that time, it was no longer imported into Canada. We then decided to use ethylene oxide (10% ethylene oxide in 90% carbon dioxide) in a vacuum fumigation chamber. Our chamber is a 250 cubic foot capacity "Fuma-Vac" system built by John Mohr & Sons, Chicago. Ambient air is brought in through a filter and evacuated through a 4" steel pipe to the roof of the museum building.

Ethylene oxide is reported to be an effective fumigant in all stages of the life cycle of museum insects and, as far as was known at the time, did not affect the artifacts in any way. It was also assumed three full fresh-air flushings of the chamber would remove all residual EtO so that the operator could remove the objects in safety. The threshold limit value (T.L.V.) for daily 8 hour exposures to ethylene oxide was set by O.S.H.A. (Occupational Safety and Health Association - U.S.) and the A.C.G.I.H. (American Conference of Government Industrial Hygenists) at 50 ppm. (by volume) in air. The safety precaution liter- fresh air. ature sent by the manufacturer said little more than "...the gas will cause eye irritation. Ethylene oxide vapors should not be inhaled."

However, in July 1979 <u>Art Hazards Newsletter</u> reported a recent Swedish study which showed that ethylene oxide was associated with a 200% increase over the expected rate in the incidence of leukemia in exposed workers and another study which showed chromosome damage occurred in workers exposed to very low levels.

In 1981, NIOSH (National Institute for Occupational Safety and Health U.S.) published a review of recent findings on ethylene oxide in its Current Intelligence Bulletin No.35. Because the substance is considered a potential carcinogen, they recommended that appropriate measures be taken to reduce worker exposure. The recommendations came as a result of an industry-sponsored study which demonstrated that ethylene oxide is carcinogenic in experimental animals: associated with increases in leukemia in female rats and malignant tumors in male rats. Moreover, there was also evidence of mutagenic effects and adverse reproductive effects in mammals. Based on these findings NIOSH recommended lowering the T.L.V. for workers exposed to ethylene oxide.

The following year, in 1982, the <u>British</u> <u>Medical Journal</u> published a study reporting that the rate of spontaneous abortions in pregnant workers exposed to ethylene oxide was three times higher than in an unexposed control group.

About this time, we received a visit from Sue Walston of the Australian Museum (Sydney) who shared with us their procedures for the operation of fumigation chambers using ethylene oxide, informed us that their T.L.V.'s had been lowered to a maximum of 10 ppm. and pointed out the necessity of having a monitoring device to measure residual amounts of EtO in the chamber after it had been flushed in fresh air.

At this point, we investigated the possibility of having the official T.L.V.'s lowered in British Columbia but ran into such a bureaucratic impasse that it was decided to adopt as our own policy the 10 ppm. maximum level. The current A.C.G.I.H. limit value was 10 ppm. and it was intended to lower this to 5 ppm. A report on the subject published by the Canada Safety Council states "Self imposed guidelines adopted by companies have been reported to range from 1 to 10 ppm. as 8 hr. T.W.A. (time weighted average) concentrations with two companies also adopting peak limits of 5 and 15 ppm. "

In order to measure the levels of residual gas in the chamber after the fumigation, it was imperative to obtain a monitoring instrument. Of the several devices on the market, a Bacharach "T.L.V. Sniffer" seemed most appropriate for our purposes 1. This instrument measures the amount of a combustible gas in the immediate environment. It is not specific for ethylene oxide. In order to find the "zero point", the machine must be calibrated in fresh air immediately prior to entering the fumigation chamber. Fresh air is here defined as clean air free of any combustible gaseous vapours. Our chamber is located very close to an inside loading dock where truck exhaust can, at times, be high enough to give a false zero-point reading. On a few occasions we could not even reach the zero point.

Protective clothing was always worn before entering the chamber to take a reading. This consisted of white cotton cover-alls, white cotton work gloves and a full-face positive pressure, supplied-air respirator. The clothing and gloves were washed every few weeks. We chose not to use p.v.c. gloves because of the known ability of that material to absorb ethylene oxide.

When we first used the "T.L.V. Sniffer", it became apparent that three fresh air flushings of the chamber were definitely not enough. We began keeping a record book which included notes on the contents of the chamber, the number of flushings carried out per day and the amount of residual gas at the beginning and end of each daily flushing cycle.

We also noticed that there was no point in doing more than 3 or 4 flushings per day because the desorption rate of the residual gas of the hemoglobin. All three aberrations are could not be accelerated. It was not uncommon to have a reading of 5 ppm. at the end of one Readings like these could continue for a week but the procedure would be repeated on a daily basis until the monitoring machine registered less than 10 ppm. over a 24 hour (or longer) period.

Next, we discovered through our records, that the desorption rate depended directly on the contents of the chamber. Ethnographic wood, textiles and baskets, paper and botanical specimens had a relatively quicker desorption rate than leather and stuffed zoological specimens but freshly unfleshed animal bones, especially sea mammal bones, had the slowest desorption rate. It seems that, besides rubber, any organic material with a high fat content (animal skins and whale bones for example) will hold the gas longer. In one case, a fumigation of whale bones required 36 fresh air flushings over a period of six weeks before the material was considered safe enough to be put into storage. At this stage, we decided to test the air in a closed storage cabinet which held bones that had been fumigated several months previously, before we had the T.L.V. monitor. After three months, the bones still registered 16 ppm. which is still above our arbitrary limit of 10 ppm.

In order to keep a check on our own health, we asked the Canadian Centre for Occupational Safety and Health (Hamilton, Ontario) for information on biological monitoring and medical surveillance for users of ethylene oxide. They informed us that if exposure occurred, the ethylene oxide itself would not long remain in the body as uncombined EtO but would rapidly form bonds with other molecules which probably accounts for many of the reported adverse health effects. There are three monitoring procedures mentioned in the literature; one involves measuring chromosome aberration or sister chromatid exchanges in the circulating lymphocytes, another measures the rate of micronucleated lymphocytes in the blood and a third measures the degree of alkylation associated with ethylene oxide exposure but their clinical significance is not known, i.e., flushing cycle only to find 40 ppm. in 24 hours. no one knows if persons with higher than normal levels of these factors have a greater than normal risk of disease. In addition, the test results may be variable and influenced by other outside (e.g., lifestyle) factors.

At this laboratory, everyone directly involved with fumigation has an annual blood count with the occupational health doctor to make sure that the white blood cell content is within normal ranges.

In the spring of this year, our conservation scientist brought to our attention the fact that ethylene oxide will re-act with chlorides to form ethylene chlorhydrin. Such a reaction can take place in any artifact with chloride contamination or deterioration by-products (e.g., artifacts from a marine environment certain leather tannages, metals with iron or copper chloride corrosion products). Ethylene chlorohydrin is not volatile and is more toxic than the fumigant itself and is readily absorbed through the skin when handled. Its presence can only be detected through destructive chemical analysis. Furthermore, ethylene oxide can adversely affect the future research potential of fumigated artifacts by changing the molecular structure of chemicals within the artifact.

It was at this point that we decided to stop using the fumigant until a safer alternative could be found. At the moment, we hold artifacts in the fumigation chamber under atmospheric pressure with a <u>Vapona</u> strip (dichlorvos) for 30 days. We are now looking into the possibility of non-chemical methods of pest control.

Bacharach Instrument co. 2300 Leghorn St. Mountain View, CA 94043

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PUBLICATIONS

National Museums of Canada

National Museums of Canada announces the availability of its <u>Conservation Policy</u>, Issue I, approved by the Board of Trustees at its meeting of March 29, 1983.

Copies are available Free of Charge from:

Policy, Planning and Evaluation Group National Museums of Canada Ottawa, Ontario, Canada KIA OM8 Tel: (613) 995-1461

Re: IIC-CG Vol. IX, No. 1. p 27

Revised Tapestry Report

The Textile Conservation Centre Limited has completed its revised <u>Tapestry Report</u>. Available in loose leaf form, it illustrates processes and equipment. Cost per report, ±5.00

Contact:

Karen Finch Principal The Textile Conservation Centre Limited Apartment 22, Hampton Court Palace East Molesey, Surrey England KT8 9AU Tel: 01-977-4943

Safe Pest Control Procedures for Museum Collections

Center for Occupational Hazards, New York

The proceedings of the conference "Safe Pest Control Procedures for Museum Collections", held 14-15 June, 1983 in New York City, are available in cassette form (\$45 US). Also available is the information package distributed to conference attendees (\$10 US), which includes an eight-page data sheet summarizing the conference. The data sheet is available separately (\$1.50 US).

Contact:

Center for Occupational Hazards 5 Beckman Street New York, N.Y. U.S.A. 10038

Re: IIC - CG Vol.IX No.2 p.5.

A Brief Guide to the Cataloguing of Archaeological Textiles, P. Walton and G. Eastwood (± 2.00)

A Brief Guide sets out to describe for nonspecialists the variety of information that should be included in the preliminary recording of a textile find - that is, before it reaches a specialist.

The handbook begins with a glossary, mainly of weaving terms, which is useful for rapid reference. The main body of the work is divied into fourteen sections- each of which describes a feature, or set of features, which needs to be recognized to enable the textile to be recorded accurately. The sections cover the condition, size and appearance of the find, the constituent fibres, the structure, the finish and decoration, and evidence of use. Both of the authors are textile specialists. Contact:

P. Walton Garden Flat 12 Bootham Terrace York YO3 7DH England

Re: IIC-CG Vol. IX No.1 p.27-28

Exhibit Brochures/Posters

Exhibit brochures and/or posters from Local Exposure: Swimwear on The Prairies will be sent free of charge to anyone who requests them. The exhibit was prepared for the Student World Games (Universiade) held in Edmonton, June/July 1983. Curator: Anne Lambert, Assistant Curator: Janine Andrews, Graphics Designer: Linda Turner.

Contact:

Anne M. Lambert Associate Professor/Curator Department of Clothing and Textiles H.E.C. Bldg. University of Alberta Canada T6G 2M8

The Fiber arts Book 11

Lark Books, a division of Lark Communications. Corporation, North Carolina, 1983.

Five Québec artists/members of the Conseil des arts textiles du Québec, have their art works published in this book: Elène Gamache, Louise Jamet, Guy Lemieux, Marcel Marois, Elizabeth Tsuk.

Lithuanian National Costume

 Antanas and Anastasia Tamosaitis.
 560 B. & W.,16 colour photos. Price per copy \$30.00, including postage.

Contact:

The Lithuanian Folk Art Institute 243 South Kingsway Toronto, Ontario Canada M6S 3V1

<u>Hali</u>

The International Journal of Oriental Carpets and Textiles.

Contact:

Hali Publications, Ltd Post Office Box 4312 Philadelphia, PA U.S.A. 19118

Tel: (215) 843-3090

Attention: Denis R. Dodds Director and American Editor

CONFERENCES/COURSES/WORKSHOPS

Harpers Ferry Conference

The 7th Conference of The Harpers Ferry Regional Textile Group will be held Nov.l and 2, 1984 at The Smithsonian Intitution, National Museum of American History, Washington, D.C. The topic of this conference will be "Special Problems in the Treatment of Three Dimensional Textile Objects." Registration deadline will be Sept. 15, 1984.

For further information contact:

Katheleen Betts The Society of Cincinnati 2118 Massachusetts Ave Washington, D.C. U.S.A. 20008

University of Alberta

The Department of Clothing and Textiles is offering a new course <u>CLTX 603</u>, Curatorial Research in Clothing and Textiles - Anne Lambert, Trudy Nicks, John Vollmer.

Dye Workshop

On October 31st and November 1st, 1983, a workshop was given by Julie Crawley of the Textiles Division at the Canadian Conservation Institute, on the "Use of Synthetic Dyes in Textile Conservation". The information was based on the Ciba-Geigy course which Julie attended last January 1983.

For this workshop, particular individuals were invited to attend in an attempt to make the workshop information available across Canada. The intention was that the participants would serve as resource people for their regions. Also, due to space limitations and "elbow room" required, a maximum of six were considered. Due to budget restraints on travel expenses for some individuals contacted, our group consisted of four textile conservators.

The workshop began with an introductory lecture which included a brief summary of the theory of dyeing, a description of the preparation of fabrics, and an explanation of the actual dyeing procedures required for protein and cellulose fibres. Finally, the development of a colour chart was illustrated. The participants were then given exercises in writing a recipe and performing the calculations for a sample dye bath.

After this introduction, the group was assigned to stations in the Textile Laboratory where the practical section of the workshop began. Each person prepared three dye baths one for protein fibres, one for cellulose fibres, and one as an individual choice for practice in colour-matching. Hand-outs included details on all aspects of the workshop, as well as complete examples of how to prepare recipes and perform calculations for the different types of dye baths.

Positive comments from all indicated that the workshop had achieved its goal: to provide the participants with the basic information needed to set up their own dyeing operations, and to continue developing colour samples in their own fabrics for their unique requirements.

EXHIBITIONS

Dugald Costume Museum, Dugald Manitoba

" Threads of a Century" April - December 1984

Focuses on typical events within a family (births, children at play, weddings, holidays and farewells) over 100 years; 1870's to 1970's. In addition to this main exhibit, the 93 drawers and cabinets of the Visual Storage Room will be displaying a variety of the collection; from ribbons and shawls to top hats and sailor suits.

McCord Museum, Montreal

"INTIMATE APPAREL: 1825-1930"

From February 29 to August 12, 1984, the McCord Museum of McGill University will present an exhibition of female undergarments, sleepwear and leisurewear from its own extensive costume holdings.

Although displays of this nature have become increasingly popular, it is the first opportunity at the McCord Museum to examine selections from this rich area of dress. It is also an initial viewing for Eastern Canada.

Costume on display includes a rare 1820's dressing gown, starkly white Victorian underwear, elegant Edwardian lingerie and tea gowns, and abbreviated "undies" of the Jazz Age. Important items such as crinolines, corsets and bustles can also be seen; it is they, after all, that shaped the changing human silhouette. This latter relationship is further investigated through a chronological series of illustrations of fashionable dress accompagnied by depictions of appropriate undergarments. Side effects of these body shapers are likewise explored; be it the humorous cartoons which were inspired by the crinoline, or more seriously, the distortions of the human body effected through tightly laced corsets.

For further information: contact Jacqueline Beaudoin-Ross (514) 392-4763/78.

Musée d'art contemporain, Montréal

" Biennale de la Tapisserie de Montréal "

du ler juillet au 12 août, 1984

Musée Marius Barbeau, Saint-Joseph, Beauce

" Le Temps des Sucres "

du 21 juin au 31 août, 1984

Coutumes et traditions reliées à l'acériculture.

Musée Marsil, Saint-Lambert

" Tapisseries de Mariette Rousseau-Vermette "

du 20 juin au 20 août, 1984

La Vieille Maison des Jésuites, Sillery

du 24 août au 9 septembre

" Trois Epoques, Trois Costumes " Costumes présentés par 3 personnages qui ont marqué l'histoire de la Vieille Maison des Jésuites

et

" Métrage Mode " Collectif des tisserandes de l'Association des créateurs et artisans de Sillery. Tissu au mètre

World's Fair, New Orleans, U.S.A.

An embroidered altar frontal attributed to Jeanne LeBer, circa 1700, of the Musée de l'Eglise Notre-Dame de Montréal, is presently on exhibition at the Vatican Pavilion of the World's Fair. It is also represented in the catalogue. "Treasures of the Vatican", New Orleans, Vatican Pavilion, 1984.

This textile was formerly treated, in 1982, at the Textile Conservation Laboratory, of the Centre de Conservation du Québec.

Re: T.C.N.-C. Feb. 1983, p. 14-15

PEOPLE

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Donna Fallis is completing a practicum at the Provincial Museum of Alberta.One of her projects is a plan for future storage in the Social History area.

Ester Klaiman has taken Kim Sykes job as Curatorial Assistant/Textiles at the Glenbow Museum. She is working 2 days per week on the curatorial aspects of the Cultural History Collection.

<u>Anne Lambert</u> has received an International Development Grant, to consult with several small museums in Peru, regarding storage and exhibition of textiles and costumes. She will be accompanied by Janine Andrews.

<u>Arlene Oak</u> is completing a contract project, for storage support forms, for the Social History section of the Provincial Museum of Alberta.

Estelle Richard has completed, on a part-time basis (March-May 1984), a one month internship at the Textile Conservation Laboratory, of the Centre de Conservation du Québec.

Barbara Schweger, Janice Cass and Gail Cariou

are working on contract research projects involving costumes and textiles at the Ukrainian Cultural Heritage Village, Alberta Historic Sites, under the direction of Catherine Cole and Cassie Palamar.

<u>John Vollmer</u> has joined the Glenbow Museum as Curator of Decorative and Fine Arts.

EMPLOYMENT OPPORTUNITIES

TWO TEXTILE CONSERVATOR POSITIONS AVAILABLE

The Pennsylvania State Capitol Preservation Committee is seeking two textile conservators to undertake a Civil War flag survey and documentation project.

Requirements would include: the operation of a textile conservation laboratory; unrolling and photographing approximately 360 flags; a condition report and basic textile analysis of each flag; preparations for exhibits, storage and conservation of selected flags.

The textile conservator must be a graduate of a conservation training program with experience in textiles. This new multi-faceted conservation facility is located in Harrisburg, Pennsylvania and all equipment and supplies will be furnished.

Applicants should send vita and references by the proposed hiring date of October 1, 1984 to:

Ruthann Hubbert, Administrator Capitol Preservation Committee House Post Office Box 231 Main Capitol Harrisburg, PA 17120 Phone (717)783-6484

PROBLEMS/QUESTIONS/INFORMATION REQUESTED

" Bad Advice "

I am looking for " Bad Advice " - magazine

articles, advertisements, illustrations demonstrating less-than-kosher ways of caring for old textiles. Crafts and antique magazines are full of them. (Perhaps you have some Bad Advice of your own - I've been recommending the burning of flags.) Quilts as table cloths, self-stick adhesive mounting boards, wedding parties in "byegone fashions" -I want to know the worst. All contributions wincingly welcomed by C. Wilson, Textile Conservator, B.C. Provincial Museum.

Cottage Knitting Industries in Canada

Marg Meikle is currently researching the Cowichan Knitting Industry for an exhibition which she is curating for Expo 86. She is interested in information on other Cottage Knitting Industries in Canada. Contact: UBC Museum of Anthropology, 6393 NW Marine Drive, Vancouver, B.C. V6T 1W5.

The Application of Industrial Adhesives to Textile Conservation

For a study of the application of industrial adhesives to textile conservation, Mary Ballard and Rebecca Rushfield are attempting to trace the use of latex as a reinforcing backing for carpets. They would appreciate hearing from anyone who has knowledge of specific rugs or carpets treated with latex. They promise to reward candor with anonymity. Please contact: Mary Ballard, Conservation Department, DIA, 5200 Woodward, Detroit, MI 48202 or Rebecca Rushfield, 150-14 Melbourne Avenue, Flushing, New York, 11367.

Re: T.C.G.N., Vol. VI, No. 3 p.1.

DISCLAIMER

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Articles in the Textile Conservation Newsletter-Canada are not intented as complete treatments of the subjects but rather notes published for the purpose of general interest,

Affiliation with the Testile Conservation Newsletter-Canada does not imply professional endorsement.

*Typing, printing and postage costs have been assumed by the Ministère des Affaires Culturelles du Québec.