A Comprehensive Conservation Survey of the Vancouver Art Gallery Permanent Collection

Sarah Spafford-Ricci, Tara Fraser, and Monica Smith

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Figure 1: © Vancouver Art Gallery and Fraser Spafford Ricci Art and Archival Conservation Inc., 2002.


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Figure 1 : © Vancouver Art Gallery et Fraser Spafford Ricci Art and Archival Conservation Inc., 2002.


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A Comprehensive Conservation Survey of the Vancouver Art Gallery Permanent Collection

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A conservation survey at the Vancouver Art Gallery in Vancouver, British Columbia, has transformed the gallery’s ability to preserve and manage its collection. The landmark project, which took two years to complete, entailed the taking of inventory, examination and documentation of 6,108 works of all media. For each work, survey conservators recorded basic data (such as location, dimensions, materials) and reported in detail on its condition and conservation needs. Data was recorded on four survey forms for each of: paintings, paper, photographs and objects (including sculpture). The forms contain a condition report specific to each media (emulating the detail and qualifiers of a standard report), and several conservation assessment and prioritization fields that are uniform across all media. Data is stored on a specially designed database from which gallery staff may create or extract reports on the character, condition and conservation needs of works to aid in planning for exhibits, loans, research or conservation projects. The survey has resulted not only in condition and conservation reports for almost all works in the gallery’s collection, it has also created a permanent conservation documentation system for future acquisitions.

Le constat sur l’état et les besoins en restauration de la collection du musée des beaux-arts de Vancouver (Vancouver Art Gallery) a permis à ce musée d’améliorer sa capacité de préserver et de gérer cette collection. Ce projet-clé, d’une durée de deux ans, s’appliqua à 6,108 oeuvres tous medias confondus et consista en l’inventaire et à la documentation de ces œuvres, incluant l’examen et le constat d’état. Pour chaque œuvre, les restaurateurs qui effectuèrent cette expertise consignèrent divers renseignements essentiels tels que l’emplacement, les dimensions et les matériaux constitutifs, ainsi que, de façon plus détaillée, l’état et les besoins en restauration. Ces renseignements furent recueillis sur quatre formulaires-types, lesquels avaient été conçus en fonction de quatre classes d’oeuvre, soit : les peintures, les œuvres sur papier, les photos, et les objets tridimensionnels (incluant les sculptures). Sur chacun des quatre formulaires se trouvaient des données pertinentes au constat d’état qui étaient spécifiques à la classe d’oeuvre en question (où l’on reprenait les termes descriptifs et les qualificatifs spécifiques d’usage); il y avait aussi une section commune aux quatre formulaires concernant l’évaluation des besoins en restauration et leurs priorités. Les renseignements furent mis en mémoire dans une banque de données conçue sur mesure et qui permet au personnel d’en soutirer des rapports basés sur les caractéristiques des œuvres, sur leur état ou sur leurs besoins en restauration, rapports qui peuvent être utiles à la planification d’expositions, de prêts, de projets de recherche ou de projets de restauration. Les résultats de cette entreprise furent donc non seulement l’établissement des constats d'état et des besoins en restauration pour presque toutes les œuvres de la collection, mais aussi, l’établissement d’un système permanent de documentation pour les acquisitions à venir.

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Background of the Collection

The Vancouver Art Gallery (VAG) is British Columbia’s largest art museum and the fifth largest public art gallery in Canada. Founded in 1931, it is located in an historic building in the heart of downtown Vancouver. The 13,500 square metre facility houses a permanent collection of 7,500 works (as of 2002) of which 65% are paper-based works of art, 20% paintings, 10% sculpture and objects and 5% contemporary art installations. The main collecting focus is Canadian art, with an emphasis on work produced after 1945.

The Vancouver Art Gallery holds the major public collection of modern and contemporary art in western Canada. The visual history of British Columbia is represented in depth, with an unparalleled collection of the work of Canadian painter Emily Carr. Other strengths include significant holdings of English graphic art, American graphic art of the 1960s and early 1970s, and Dutch paintings of the seventeenth century.

In its history, the VAG has had a number of different conservators as well as some intervals with no conservators on staff. Currently, there is a staff of two conservators. Before the conservation survey project took place, the conservators would complete condition reports by hand on an open-format form and enter the information on a word processing program whenever a report was required for loan or exhibit. The registration files sometimes contained brief information on the condition of catalogued items, some of which was incorporated on a gallery-wide computer database. Data on the condition of works, available for only half the collection, was scanty and varied in detail and quality. In particular, there was little or no information on the conservation requirements of the work of art.

By the mid-1990s, the VAG conservators concluded that the lack of documentation on the condition and conservation needs of the collection did not meet the increasing demands of exhibit, loan and research. They found it difficult to plan and prioritize conservation work. While the gallery was improving
the management of its catalogue records in an automated database management system (STAR), conservation information was not readily accessible to VAG collection staff.

In 1996, the VAG conservators began to plan for an item-level conservation survey on all works in the permanent collection. A successful grant application was made to the Getty Conservation Institute and additional resources were acquired from the Museums Assistance Program, Department of Canadian Heritage and from in-house gallery funds. The survey was contracted to Fraser Spafford Ricci Art and Archival Conservation Inc. (FSR, the survey conservators) of South Surrey, BC. FSR devised the survey methodology and worked closely with the VAG’s conservators and other staff. The survey began during the fall of 2000, examinations were completed in May of 2002 and data input is scheduled for completion in 2003.

Project Parameters

A total of 6,108 works of art from the VAG Permanent Collection were included in the survey. This number was an estimate of works acquired prior to 2000 (excluding some large crated installations which were inaccessible). Works were retrieved, uncovered and unpacked as required, and then visually examined “as is” with auxiliary lighting (no works were disassembled or removed from frames).

The VAG conservators wanted the survey data to be collated in a form that emulated standard conservation documentation and contained in a database that allowed easy access for searching entries as well as the ability to create new entries and update old ones. For this reason, the survey went beyond the summary or specially targeted data collection common to most conservation surveys. In particular, the VAG survey was designed so that a conservator would be able to carry out a preliminary analysis of a work – for example, when considering loans – without having to view the work itself.

In the initial stages of the project, staff from VAG Museum Services (curatorial, registration, conservation and preparation) were consulted to determine the type of conservation information they wished to have included in a database of the permanent collection. Their recommendations were incorporated into the database entry system. Each entry was designed to include i) registration information (such as work dimensions, media, vault location) that would confirm or revise previous gallery data, ii) work condition and iii) numerous conservation assessments that would be useful to all areas of Museum Services (such as storage needs, degree of conservation required, packing requirements and the degree of risk involved in transporting the work).

The pre-existing database for the gallery’s collection, STAR, was proprietary and could not easily be expanded to include detailed conservation information. Therefore, a separate survey database was developed using Microsoft Access (a program familiar to the survey conservators and the VAG staff). The new database is accessible gallery-wide and linked to STAR through VAG accession numbers.

All the survey data were recorded initially on paper forms. The paper forms were regarded as safer and more accessible than information stored on a computerized form. Furthermore, the recorded information far exceeded the storage capabilities of a typical hand-held computer device (e.g. Palm Pilot) at the time of the grant application.

Project Description

In the early planning phase of the project, draft survey methodology and forms were developed for grant applications being sent to funding agencies. After funding for the project was secured, a schedule was designed for the development of the outsourced database and for the survey process in accordance with VAG staff schedules.

The design of the survey form evolved over a three-month period using a sample group of 300 works of different media. During the trial period, the conservators revised and edited the fields on the draft survey forms. After consultations with VAG staff, the forms were sent out to several conservation specialists for critical review. Their suggestions were incorporated into the final forms.

Primary features of each work (artist, title, date, media/materials, dimensions, frame character, vault location and curatorial priority) were printed from the gallery’s catalogue database as a “top-sheet” and attached to the appropriate survey form. Surveyors confirmed and edited this data and also indicated whether a current VAG accession label was present on the work. The top-sheets served as an inventory of works on the gallery’s STAR database. Surveyors worked closely with the registrars to ensure the accuracy of information in the gallery’s database, including the location of works.

Survey conservators determined field labels and defined the format of each field. They also created a format for common reports that could be generated from the database with accompanying queries. An applications specialist was contracted to customize an Access database to process survey data according to the specifications laid out by survey conservators. This meant an input engine tailored to process four standardized survey forms and a specified format for search queries and data output for conservation reports. Twelve queries were used to test the database output in trial conservation reports.

The survey conservators developed a 320 page data dictionary as a reference manual for the use of the staff. The dictionary defines each data field and provides qualitative descriptors of i) survey patterns (for example, the fields that the examiner chooses to define the matting characteristics for an unmatted paper work), ii) assessment quality (for example, a colour photograph in good condition but stored on the screens was most often rated “fair” for long-term stability) and iii) premises upon which the conservation assessments are made. Several conservation glossaries were consulted as a starting point for condition terminology.
The surveyors examined works by vault location and, on occasions when works from the permanent collection were on display, examined art in the gallery spaces. Equipment used for the visual inspection included an examination cart with a work surface and triangular writing supports built onto the vault ladders, tripod-mounted fluorescent lights, a mobile arm examination light, flashlights and an Optivisor. No other specialized examination equipment was employed. Figure 1 shows surveyors examining works in the vault.

There were two primary surveyors, one for paintings and objects and the second for paper and photographs. They often had the help of two assistants who located the works, measured them and confirmed basic data listed on the top-sheet. As time permitted, the assistants also carried out a preliminary examination of artwork condition. Where this was done, the second assessment of object condition generally improved the quality of the survey.

The examination of each work took approximately 23 minutes on average. Up to one quarter of this time was spent finding and accessing the work and then confirming/editing the basic artwork data. Examination time varied with the type of art. Paintings normally took the most time, objects somewhat less and paper the least. The time required to examine a work also varied according to storage technique – for example, a work stored on the screens was much slower to access than a work stored in a Solander box or drawer. Most of the examinations of works on paper and photographs stored matted in a Solander box ranged between 13 and 15 minutes; when framed and stored on a screen the time increased to about 20 minutes. Paintings, most of which were hung on screens, could normally be examined in 20 to 30 minutes, whereas those in a drawer or bin took between 18 and 25 minutes. Objects, most often accessed from shelving (some also required unpacking if boxed), typically took between 15 and 25 minutes. For works that were multiples, complex or unusually large, examinations sometimes extended to an hour.

During their inspections, the survey conservators noted those specific works requiring immediate attention from the VAG conservators. Improvements carried out included remounting paper works with slipped hinges, cleaning and freezing objects with insect infestation and placing fabric covers on light-sensitive works. The survey conservators also tidied storage boxes (adjusting tissues, etc.) and applied the accession number on the verso of many un-numbered works on paper.

VAG conservators and volunteers entered the survey data onto the conservation database and the registrars edited the data on the gallery’s database. The survey conservators reviewed any records that required additional information or explanation and this review provided some quality control for the survey data. After data entry, the survey forms were archived. For additional security against loss of computer data storage, the database was included in the daily backup of the gallery-wide network.

The total budget for the VAG survey project was $162,515.00. Of this, $114,660.00 was spent on outsourced conservators (FSR) for development of the survey framework and methodology, survey forms, database design specifications and surveying of the works, $7,830.00 for database engineering and $30,405.00 for VAG staff. The gallery spent approximately $9,620.00 on supplies, equipment, software and computer database training for the VAG conservators. The survey took 703 days. Table I details the number of days spent on each stage of the project and who contributed this time.

**Design of the Survey Forms**

The most critical part of the survey project was to design an appropriate survey form for management of the database. To meet this objective, the survey conservators drew upon their previous experience and consulted closely with VAG staff to design the forms (i.e. database fields) required to collect this information.

Four forms were developed by FSR for use in the survey:
- paintings on canvas and rigid support
- works of art on paper
- photographs
- objects and sculpture

A fifth form, for audio visual and electronic media was also produced, but not used in the survey project itself. This material is to be surveyed in the future by the VAG conservators and their audiovisual technician. For art installations, the primary medium of the installation determined the type of survey form to be used (in most cases, the objects/sculpture form).
Table I. Summary of Days Spent on VAG Survey Project.

<table>
<thead>
<tr>
<th>Project Planning</th>
<th>Form/Data Dictionary Development, Survey Pre-Test</th>
<th>Project/Survey Administration, Assistance</th>
<th>Examination of Artworks/ completion of Survey Forms</th>
<th>Database -Development, Consultation, Quality Control, Maintenance</th>
<th>Data Entry</th>
<th>Total Days Spent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAG Conservation Staff</td>
<td>12</td>
<td>3</td>
<td>70</td>
<td>3</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>VAG Conservation Volunteers</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
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<tr>
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<td>1</td>
<td>37</td>
<td>0</td>
<td>0</td>
<td>0**</td>
</tr>
<tr>
<td>VAG Preparation Staff</td>
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<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VAG Management/ Curatorial Staff</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>90</td>
<td>15</td>
<td>336</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Total Days Spent*</td>
<td>31</td>
<td>96</td>
<td>137</td>
<td>339</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

*Based on a 7 hour working day.
**Does not include time to update the gallery’s documentation database, STAR with survey edits of basic artwork data.

The three basic sections shared by the forms were: storage, condition record and conservation assessment. In an effort to standardize the sections, the fields within were listed alphabetically, pluralized and written as nouns or adjectives rather than verbs (e.g. “faded” rather than “fading”). A complete paintings survey form is shown in Figures 2, 3 and 4.

Storage Section

The storage section illustrated in Figure 2 is the same on all four forms. The fields in this section include notation of the storage mode for the work (type of storage location such as drawer, shelf) and housing (primary housing such as Solander box, pallet) and the required improvement (new or altered mode or housing). It was found during the testing period of the form that more detailed descriptors of storage data (such as the actual type of storage housing required) increased the survey time without increasing the section’s usefulness.

Condition Record Section

For all works, the condition illustrated in Figures 2 and 3 was analyzed for each component of the work (auxiliary support, primary support, media, frame, base/mount, etc.). Within each component, further definitions were called for (media included watercolour, charcoal and so on). On the forms for paintings, works of art on paper and photographs, the components are generally: the support layers (primary, secondary, auxiliary etc.), the ground and image layers, surface coating and the presentation (matting, mounting, framing and installation systems). To standardize information, the framing section is identical on these three forms and the matting and mounting component is identical for works on paper and photographs. Each component was given an overall condition rating – good, good/fair, fair, fair/poor, poor.

Field addresses were designed with consideration for both historic and contemporary art materials and techniques and standardized to avoid colloquialisms and terms combining technique with composition/type (e.g. “ink” was used rather than “pen and ink”). The fields for object character were designed to exclude references to conservation treatment; for example, a work without a frame is identified with “no frame” rather than “unframed”, which may imply that a frame was previously present.

Clarity, brevity and appropriateness were the guiding principles in designing condition field labels. Descriptors for condition of the work included negative rather than a combination of negative and positive attributes as a means to keep the description of conditions clear and germane. In contrast to most conservation surveys, the VAG survey includes a qualitative ranking system to accompany all condition fields (slight, slight/moderate, moderate, moderate/severe, severe). It became apparent during the initial survey trials that the description of a defect such as “paint losses” is of minimal usefulness unless accompanied by a qualifier such as whether the paint loss is slight or severe.

To aid VAG staff to envision a possible conservation treatment, condition fields whose treatment may involve a similar process were grouped (for example, “gouges and scratches” were both designations referring to the potential need for a fill). Some
Figure 2. Annotated copy of page 1 of the Fine Art on Canvas or Rigid Support data entry form filled out for the artwork *Untitled* by W. G. Storm.
Figure 3. Annotated copy of Page 2 of the Fine Art on Canvas or Rigid Support data entry form filled out for the artwork Untitled by W. G. Storm.
defects, not usually found in condition surveys, were noted in order to indicate possible conservation treatment. For instance, “frame lacking,” indicates that the work is intended to be framed, but is missing a frame and if a work is designated as “no frame” then no frame exists and none is required. If a painting is identified as “lacks verso protection” this indicates a need for protection on the reverse which could include a backing board or a different technique for ameliorating this problem.

The condition record for objects and sculpture was designed to accommodate a wide range of object materials and methods of construction. The goal was for the record to be flexible enough to allow the surveyor to describe a variety of objects but precise enough to produce meaningful reports from the database. In each record, the surveyor was able to document the composition, character and condition of the object in three identical sub-sections (called Materials 1, 2 and 3). The surveyor then assigned object materials or components to one or all of these sub-sections in any manner that increased the clarity of the condition record for a particular object. Another section accommodated the description of the mount, base or installation system for the condition record. For example, for a contemporary installation constructed of vinyl sheet with pockets containing photographs suspended from a metal hanging bar, descriptors for the vinyl were documented in the Material 1 section, the threads that were used to attach the vinyl (and their particularly poor condition) were documented in Material 2, the descriptors for the photographs were documented in Material 3 and the description of the mounting from the metal bar is documented in its own allotted area of the form. On the other hand, in the case of an object with simple construction such as a painted ceramic, the composition and condition of the two materials were described together in the Material 1 section and the Material 2 and 3 sections were left blank.

Conservation Assessment Section

The conservation assessment section illustrated in Figure 4 was designed to apply to each survey form in order to ensure uniformity and standardization of inputs. This meant that the conservation assessments were made in a common format even though the condition report was specific to each type of media. This allows a person using the conservation database to analyze and compare the conservation needs and conservation priority of all works in the collection, regardless of media type, and to produce coherent conservation reports either by media type or for the entire collection.

After examining the work in detail for composition and condition, the surveyor asked: Regardless of appearance, what is the overall stability of the work and to what degree will the stability be improved by conservation? Then, regardless of stability, what is the overall appearance and to what degree will the appearance be improved by conservation? The answers were designed to assist conservators in their decisions regarding treatment, to help curators analyze and choose works for exhibit or loan, and to provide a justification for those decisions.

For each work, a proposed conservation treatment was set out in summary form. This included the degree of difficulty, estimated time of treatment, conservation needs for the frame/mount and the work required to improve storage. One scenario considered was the requirement for a partial treatment on short notice just “to put the work on display” instead of a more detailed and comprehensive approach to conserving an item. The assessor addressed this reality by answering the question: what degree of treatment is required for an in-house exhibit? In order to cater to all treatment decisions (which vary with individual conservators and processes available), the form did not require that specific protocols for treatment be analyzed. Of course, treatment is implicit, in general terms, in the condition record.

The next section of the survey form, following the recommended protocol for treatment, assessed the inherent risk of damage involved in loan and transit. The surveyor answered the questions: What is the current risk for transit (low, medium, high, not suitable)? What elements of risk are involved (for example, handling, size or inherent fragility)? To what degree will risk be lowered by conservation (slightly, moderately, significantly)? The surveyor then itemized the general loan requirements (for example, the need for handling, transport and storage (HTS) frame or an exhibit mount). These requirements were object rather than loan specific. For example, the need for a high quality courier is not a choice because it is likely dependent upon the circumstances of loan.

Lastly, the surveyor set out a priority list for conserving a work of art under two differing circumstances: i) if the work will primarily remain in storage and ii) if the object is going to be placed on exhibition. The decision to create different priority lists arose from the preliminary testing of the form in practice where it became evident that differing priorities for treatment were required when the future purposes of the work were considered.

Survey Results

The VAG conservation survey resulted in standardized condition reports for almost every work in the permanent collection and created a documentation system for the use of VAG conservators. The documentation system includes standardized forms, an accompanying dictionary of terms and a fully relational database. The database is large and detailed, yet simple in design and easy to use. Because the database is not proprietary, it may be altered and expanded to suit the future needs of the gallery (conservators are already planning to add conservation treatment fields to the database). Furthermore, the data set may be exported to another program if necessary in the future.

One of the salient features of the VAG database is its comprehensive structure. The survey forms for the database were designed to allow flexibility in the interpretation of data so VAG conservators can reach conclusions beyond the standard priorities. It allows conservators to make preliminary decisions about the condition and conservation needs of a work without having to conduct a visual examination of the work. Figure 5 shows a complete conservation report for the painting Untitled by W. G.
**Figure 4.** Annotated copy of page 3 of the Fine Art on Canvas or Rigid Support data entry form filled out for the artwork *Untitled* by W. G. Storm.
Figure 5. A complete conservation report for the painting *Untitled* by W. G. Storm, generated from the VAG conservation survey database.
Storm. Many reports like this sample one are currently accessible to VAG staff to provide summaries of the condition of works of art and pertinent information for research or for planning an exhibition, loan, conservation treatment or preservation upgrading. Sample types of reports are listed below:

**Loan**
- When a conservator has to determine whether a contemporary painting can be loaned, a report lists the work’s condition, conservation requirements, transit risk and loan requirements.

**Exhibit**
- When a conservator or curator is considering a group of works for immediate display in-house, a report can list the overall stability and appearance of the works and whether they will be improved by conservation, the conservation priority, and action required to prepare the works for in-house exhibit. The database permits lists to be displayed in order of conservation priority or in accordance with which works require the most treatment time before an in-house exhibit.

**Conservation Treatment and Improvement Projects**
- When a conservator wishes to plan for treatment of paintings that are in the worst condition, a report can be created from the database to list all paintings with a high conservation priority and provide a “snapshot” of their condition and the conservation requirements. **Figure 6** illustrates this type of report.
- When a conservator draws up a list of conservation treatments for an intern to carry out, a report from the database can be created to itemize all treatments of low to moderate complexity listed in order of highest to lowest conservation priority.
- When a preparator or conservator is improving the matting of works of art on paper, a report can list all paper works requiring upgrading of the matting/mounting, in order of the degree of need. **Figure 7** illustrates this report.

**General Research**
- If VAG management wishes to prepare a grant application to support the conservation of a collection of photographs, a report can be generated to list the works in order of conservation priority, an estimate of the time required for conservation treatment and the degree of complexity of those treatments.
- If gallery staff is trying to gauge whether photographs require cold storage, a report can list all photographs with a coloured image layer.
- If a curator is planning an exhibit of lithographs by a certain artist, a report can be generated that only lists the artist’s lithographic prints. If time is short, a report can be generated that selects only matted lithographs.

The survey yielded enormous benefits to collections management at the VAG, particularly the documentation of the condition of works in the permanent collection. The survey presented an opportunity to examine and inventory almost every work in the permanent collection and to confirm and correct data on works of art contained in the existing STAR database. For example, dimensions for 90% of the collection were elaborated, expanded or corrected, the need for new gallery labels was identified for 35% of the collection, storage locations were updated for 30% of the collection and the description of media (to be downloaded from the gallery database onto exhibit labels) was edited and standardized for 15% of the collection.

**Lessons Learned**

In an item-level survey of thousands of objects (for example, the VAG permanent collection), information gathering *per se* is the most labourious and time-consuming feature. Yet, as was learned, the most critical aspect of the survey was investing time and energy in designing the forms and database. It was quickly discovered that the usefulness of the data depended upon having data sufficiently detailed to address all possible retrieval requirements and capable of generating meaningful reports summarizing or comparing conservation information on different works, regardless of media type. Thus, it was essential to set aside a substantial preparatory period for designing appropriate data fields and descriptors as well as sufficient testing of a prototype database.

A unique aspect of the survey at the VAG was that the relational database encompassed works of all types of media. Such a wide-ranging survey required personnel and design considerations that went beyond those required in the survey of one object type (such as a survey of books or works of art on paper). This included developing standardized criteria for analysis of the works to ensure objectivity and uniformity. Crucial to this was the development of a detailed data dictionary to serve as a framework for cataloguing information in each field in a precise and objective manner. Ultimately, staff using the database can be confident that different works were evaluated with the same criteria (for example, a high priority rating for a work on paper is equal to a high priority rating for a sculpture).

Although it was not the initial intention, the short time frame set for the VAG project meant that examinations began prior to the full completion of the database engineering. This was possible because data entry was done on paper-based forms; nevertheless, the survey project would have proceeded in a more efficient fashion if the database had been fully operational before the survey proper began. In retrospect, more time should have been devoted to the pre-test period (consultations, test survey, editing of survey forms and development of the data dictionary) and the creation of the database; six months, instead of the three months allotted, would have been preferable. The survey conservators also concluded that more works should have been sampled during the pre-test period, because changes were made to the forms after the survey began.

While examination time and surveying costs were adequately projected for the VAG survey, project administration
### Summary of Conservation Requirements for Paintings with High Conservation Priority

<table>
<thead>
<tr>
<th>Stored Priority (conservation priority)</th>
<th>Exhibit Priority (conservation priority if artwork is scheduled for exhibit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>48.1 Savage, Anne <strong>The Lighthouse</strong></td>
<td>high</td>
</tr>
</tbody>
</table>

- **Difficulty/Complexity** (of a full conservation treatment) moderate
- **Time Required** (estimated for full treatment of the work) 1 day – ½ week
- **Frame/Mount** (degree of conservation/preparation required for frame/mount) minimal
- **Storage** (conservation/preparation required to improve storage) minimal
- **Appearance** (overall condition of the artwork - appearance) fair
- **Stability** (overall condition of the artwork - stability) poor

<table>
<thead>
<tr>
<th>Stored Priority (conservation priority)</th>
<th>Exhibit Priority (conservation priority if artwork is scheduled for exhibit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.32 Cope, Dorothy <strong>White and Orange and Pink</strong></td>
<td>high</td>
</tr>
</tbody>
</table>

- **Difficulty/Complexity** (of a full conservation treatment) major
- **Time Required** (estimated for full treatment of the work) ½ week – 1 week
- **Frame/Mount** (degree of conservation/preparation required for frame/mount) major
- **Storage** (conservation/preparation required to improve storage) minimal
- **Appearance** (overall condition of the artwork - appearance) fair
- **Stability** (overall condition of the artwork - stability) poor

<table>
<thead>
<tr>
<th>Stored Priority (conservation priority)</th>
<th>Exhibit Priority (conservation priority if artwork is scheduled for exhibit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.35 Town, Harold <strong>Tyranny of the Corner Bowl Set</strong></td>
<td>high</td>
</tr>
</tbody>
</table>

- **Difficulty/Complexity** (of a full conservation treatment) moderate
- **Time Required** (estimated for full treatment of the work) ½ day – 1 day
- **Frame/Mount** (degree of conservation/preparation required for frame/mount) moderate
- **Storage** (conservation/preparation required to improve storage) minimal
- **Appearance** (overall condition of the artwork - appearance) good
- **Stability** (overall condition of the artwork - stability) fair

Figure 6. The first page from “Summary of Conservation Requirements for Paintings of High Conservation Priority”, a report for choosing paintings for treatment in the lab.

Time and pre-testing the forms and database was seriously underestimated. It was found that a project of this type would be best covered by an additional 30% above the $162,515.00 that was spent.

Early in the project planning, conservators decided to expand the survey to include some basic artwork data that could be edited on the gallery’s STAR database; this increased survey examination time by approximately 20%. However, this time commitment was more than offset by the immense improvement in gallery documentation records. Side benefits included increased cooperation among staff involved in the survey process and the goodwill generated by adding value to the gallery.
Vancouver Art Gallery Conservation Report

Description of Condition for Paper-Based Artworks Whose Matting/Method of Attachment is Poor

<table>
<thead>
<tr>
<th>2000.29 a-dd</th>
<th>Ruscha, Ed</th>
<th>Title Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matting/Method of Attachment (overall rating)</td>
<td>poor</td>
<td></td>
</tr>
<tr>
<td>Top Mat</td>
<td>no top mat</td>
<td></td>
</tr>
<tr>
<td>Method of Artwork Attachment</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Attachment Materials</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Back Mat Materials</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Condition (of matting/method of attachment)</td>
<td>top mat lacking severe back mat lacking severe mounting inapprop/inadeq severe</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2000.38 -10</th>
<th>Kolbe, George</th>
<th>Kneeling Woman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matting/Method of Attachment (overall rating)</td>
<td>poor</td>
<td></td>
</tr>
<tr>
<td>Top Mat</td>
<td>four ply matboard</td>
<td></td>
</tr>
<tr>
<td>window mat present - float</td>
<td>adhered:local</td>
<td></td>
</tr>
<tr>
<td>Method of Artwork Attachment</td>
<td>assumed</td>
<td></td>
</tr>
<tr>
<td>Attachment Materials</td>
<td>adhesive:synthetic</td>
<td></td>
</tr>
<tr>
<td>Back Mat Materials</td>
<td>cardboard</td>
<td></td>
</tr>
<tr>
<td>Condition (of matting/method of attachment)</td>
<td>back mat poor quality severe mounting inapprop/inadeq severe top mat depth inapprop/inadeq moderate work touching glazing moderate</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7. The first page from “Description of Conditions for Paper-Based Artworks Whose Matting/Method of Attachment is Poor”, a report generated from the VAG conservation survey database for a preparator undertaking rematting and matting improvements.

In some cases, only summarized information of works is required in surveys. But even to acquire summarized data, a significant fraction of time and effort is invested in retrieving and examining works. However, it does not add appreciably to the total examination time per work to, for example, conduct the more detailed VAG survey once you have prepared the database and companion data dictionary. In the end, the extra time and effort required to develop the VAG’s encompassing database was justified, since it added enormously to its versatility and comprehensiveness.

In this study, data were first recorded on paper and later entered on a database. Although making the paper record added 50 days to the project time, volunteers did most of the work of database entry. Creating a permanent record of data on paper had several advantages. First, it allowed the surveyor to consult different areas of the multi-page form with ease, since it was often necessary to revisit the condition report several times while completing the conservation assessments; second, data fields and survey design were not limited by the technology of electronic data capture at the time of the survey; and lastly, the VAG conservators were left with original paper records to back-up the computer records and ensure quality control of the data entry. Since the survey was carried out, the capacity of hand-held computers has increased substantially to the point where it will be feasible for VAG conservators to employ such devices to enter data in the future.

Conclusion

Over the last decade it has become increasingly evident that there is tremendous benefit in developing conservation surveys for those that plan and undertake the care, preservation and conservation of cultural property. In Canada, several large-scale surveys have been completed, including the survey of military museums by the Canadian Conservation Institute and extensive surveys at the National Archives of Canada. In general, conservation surveys differ widely in their purpose and design.
according to the information that is being collected and how it will be used. To date, the conservation survey project at the VAG is the country’s largest and most detailed item-level survey to document and analyze the condition and conservation needs of a multi-media art collection. The survey provides a condition and conservation assessment of 6,108 works of art accessed from a fully relational database. The survey forms document different art media in over 1,000 pull-down fields and the data standardized for condition and conservation analyses across different media. Finally, this conservation survey resulted in a new conservation documentation system for the gallery.

The conservation survey project has led to significant improvements in the care and preservation of the collection of the Vancouver Art Gallery and will be an invaluable asset to staff that work with the collection. Jacqueline Gijssen, the current Head of Museum Services at the VAG, summarized the survey as “a landmark project that has transformed our ability to understand the physical condition of our permanent collection and to prioritize and plan for conservation actions in the future. The scale and caliber of the project was outstanding. We have gained a deeper understanding and knowledge of our permanent collection and have been able to improve its documentation and the processes through which we manage the collection. All of these actions are key to the success of the institution and its preservation and management of the collection.”

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References


7. van der Reyden, Dianne, Deterioration Terms: Guidelines for Paper Artifacts (Suitland, MD: Smithsonian Center Materials Research and Education Program (formerly Conservation Analytical Lab), 1989).
