

Collection Condition Surveys

Many museums now incorporate condition surveys as a normal part of their conservation planning. Collection condition surveys are undertaken in order to assess (audit) the condition of collections as a whole. The benefit of a collection condition survey is that it will collect baseline information that will help you to:

- make definitive, quantifiable statements about the condition of the collections;
- compare condition of different parts of the
- collection or collections in different locations;
- produce evidence about the damage that has happened to the collection and link it with the conditions in the museum;
- prioritise actions to improve the condition of the collection;
- estimate the cost and time to achieve the improvements needed.

Types of Condition Surveys

In-depth survey of a small number of objects

These are normally commissioned from a conservator who specialises in a particular type of material or artefact. They involve a thorough examination of each object and result in a detailed written report as outlined in the previous section. Such surveys often include an estimate of the time and cost of the remedial conservation work required. You might commission one of these to help plan your conservation expenditure, or to support a fundraising application, or to help plan an exhibition.

Sample surveys

These involve a limited examination of a selection of objects from the whole collection. The results are normally presented as statistics accompanied by a summary of conclusions and recommendations. This will provide useful information about the collection as a whole, which can then be used to make decisions about priorities for collections management. Conservators with experience of a range of collection types normally undertake such surveys.

A warning

Although condition surveys are an effective collections management tool, carrying out such surveys is not a simple task and a number of aspects of the process require a great deal of preparatory work. For example, in order to obtain reliable results, the statistical methods used may need to be tailored to the museum's particular circumstances. Taking short cuts may result in some fundamental and expensive mistakes.

What Does a Sampled Collection Condition Survey Involve?

Decide *exactly what you want from the survey*. Before you begin examining the collection, you should have a clear idea of the purpose of the exercise. When you know the sort of information you want, you can decide what type of survey and what level of investment is appropriate. A consideration of the likely results will help you to decide what are the right questions to ask in the survey. How, for example, will knowing that there are several hundred years' worth of conservation work needed on your prints and drawings collection be of benefit if you only have one

conservator in your museum and there is no prospect of additional funding? If what you need to produce is a general action plan then you may not want to spend too much finding this out. On the

other hand, if you want to put together a grant bid for a large conservation project, then it would be appropriate to obtain a precise estimate of the work needed.

Ask yourself if a condition survey is the best way to achieve your aims

Is a survey the best way to obtain the results that you want? Collection condition surveys will produce data that can be presented as simple charts that are an effective way to communicate detailed information. However, it may not be necessary to undertake a collections condition survey to make your case. It could be possible to produce a report from information that is already available.

Once you have decided to go ahead with a collection condition survey, you should prepare a brief and find a consultant to carry out the work. You can find details of conservators that carry out condition surveys from the Conservation Register (see Appendix 2) or your local AMC The advantages and disadvantages of using in-house staff to carry out the survey are discussed later in these Guidelines.

Only experienced conservators should carry out survey work. Although it may appear to be a simple and mechanistic process, it is based on a thorough understanding of materials and their decay processes. An ability to judge the severity and implications of damage is vital. Inexperienced conservators or non conservators often concentrate on trivial surface detail when making their assessments.

Briefing the Conservator

Unless you are very experienced in carrying out collection condition surveys you will probably only be able to provide the conservator with an outline brief. You will need to spend some time working with them to define the project so that it produces the results that you want.

First discuss with the consultant what you want to get out of the survey. Give them as much information as possible about:

- the nature of the collection to be surveyed (e.g. its history and significance, previous conservation treatments);
- the purpose of the survey (conservation programme, grant application);
- the locations to be surveyed;
- any deadlines to be met;
- limitations on access.

Together with the conservator you will then need to:

- agree the methodology and terminology;
- design the sampling procedure;
- decide whether a pilot survey is necessary;
- agree the type of analysis and report required

These are discussed in more detail below.

Agree the methodology

It is necessary to identify what are the key questions to ask and design an effective survey form. Keep the number of questions to the minimum, as unnecessary questions add to the time needed to carry out the work and so increases the cost. The categories of questions likely to be included are:

Administrative data - location of the objects, identification and description.

Descriptions of damage - typical categories are major or minor structural damage, surface damage, disfigurement, chemical deterioration, biological attack, harmful old repairs and accretions. Other factors could be specific to your collections; e.g. a geology collection would probably have a category for 'pyrite decay'.

Condition grade score - this records the severity of the damage in the context of the collection and most surveys use a four-level condition-scoring scheme, fair to unacceptable. These are defined below.

Condition grade	
Good	Object in the context of its collection is in good conservation condition, or is stable
Fair	Fair condition, disfigured or damaged but stable
Poor	Poor condition, and/or restricted use, and/or probably unstable
Unacceptable	Completely unacceptable condition, and/or severely weakened, and/or highly unstable and actively deteriorating, and/or affecting other objects

Other questions

It may also be useful to record curatorial value, probable cause(s) of damage and deterioration, repackaging and conservation needs, priority action for conservation and quality of the storage environment.

A team of two people often carries out the actual survey as this speeds up the process and results in fewer errors. If a particular type of collection is to be surveyed, at least one of the surveyors must have specialist knowledge of the subject. The lead surveyor may need to work with a number of specialists. If curatorial value assessment is to be included, then a curator should do this separately from the conservation survey.

Terminology

It is vital that those commissioning the survey and those undertaking the survey agree on the terminology to be used. A simple example of confusion is where one person considers a fragment of pottery to be 'a complete pot shard' whilst another describes it as a 'broken pot'. There is no correct answer, only one which is appropriate to your collection. If you plan to leave that sort of decision to the surveyor, insist that they record the information. Everyone using the survey results will then interpret them correctly.

Any abbreviations of terms used during the survey must be included on all survey forms.

Design of the sampling procedure

The sample must be statistically valid or the survey results will have little value. If possible, objects to be surveyed should be selected by random sampling from the catalogue. If this is not possible, then a two-stage systematic sampling procedure can be used. Samples of each storage location (box, palette or shelf) are selected and then a proportion of objects at each location is surveyed.

The size of the sample will be determined by the objectives of the survey, the variety of the collections and accommodation, the size of the collection and the degree of accuracy required. A recent project to develop standard methodology for surveying library material found that a sample size of 400 objects per type of collection (books, videotapes etc.) was sufficient. The American Library of Congress surveyed 20 million books using a sample of 1000. Keene (1996) suggests that for museum collections the minimum useful sample size in surveys is approximately 1000 objects. Careful sample design will keep the number of objects to be surveyed to a minimum.

The reliability of the results is improved if fewer objects are looked at in detail rather than a larger number cursorily examined.

Experienced conservators will be familiar with sampling methods and so able to advise. If the survey is to be of a large and diverse collection or is to be regularly repeated, it is worth discussing the sampling method with a statistician.

A pilot survey

A pilot survey is advisable for large-scale surveys. It enables the surveyor to fine-tune the methodology to ensure that it will provide the information you want it to and that the work can be completed on schedule. A pilot survey and analysis of the results will normally take up to 20% of the total survey time available. The surveyor will discuss with you any changes to terminology, sampling procedure etc. suggested by the pilot study.

Analysis of the data and reporting the results

You will probably want the surveyor to produce some or all of the reports that you need. If there are deadlines to meet, such as revision of the forward plan, make sure that this is all agreed in advance with the surveyor and specified in the contract.

It is important to allow sufficient time for the analysis of the data and writing the report. It is not unreasonable for a consultant to spend up to a week doing this. The most useful report is one that provides a concise and accurate analysis, with well thought out conclusions. Remember that surveys are only an initial step in the ongoing process of improving collection care.

Typical reports are analyses of collection condition by:

- collection type or material; location;
- the whole institution.

A discussion of critical factors together with recommendations for improvements and a summary for presentation to the board of governors or trustees will also be useful. There may also be reports on specific studies that you requested, such as a comparison of the condition of objects on display with those in storage.

It is worth remembering that funding bodies are increasingly requiring that grant applications be based on work priorities identified through a survey or formal review.

You should also consider whether it would be useful to combine the results of the proposed survey with other information that the museum holds. This could be from previous surveys, environmental records, treatment files or reports of damage to objects caused by accident or neglect. You must include this requirement in the brief and contract if you want the consultant to do this.

Most important of all, remember to specify that a summary of the salient points i.e. the overall state of collections and conclusions is included in all of the reports. Once all the above has been agreed, a contract for the project can be prepared.

The preliminary work and a pilot study, if required, will enable the main survey to run smoothly.

What Museum Staff may Need to do During the Survey Work

The surveyor's work will be made easier if the following preparatory work is carried out. Although the consultant could do some of it, everything you do in preparation will reduce the time taken and, ultimately, the cost. Discuss these issues in advance, when the brief or contract is being agreed.

Elements of the Contract

The agreement with the consultant must cover the following points:

- the basis for the charge (time or project-based),
- VAT and any ancillary costs;
- the stages at which payments are to be made;
- the individuals who will undertake the work;
- the date the survey should commence;
- the type and format of reports required;
- completion date;
- payment terms;
- insurance arrangements, covering the conservator to work on the museum's premises.

Some contracts may need to cover the following additional considerations:

- whether you permit the conservator to refer in any way to your survey in any discussions, lectures, publications, etc;
- under what arrangements may the conservator subcontract any of the work;
- working arrangements on-site. Any specific security requirements, hours of access, support; requirement to notify if the actual cost appears likely to exceed the estimate;
- named individuals who will be the main point of contact during each stage of the project.

Prior to the survey:

- discuss the objectives of the survey with the consultant (as described above); provide information about the museum – the consultant may send a questionnaire or ask to see copies of policy documents or previous reports;
- provide relevant health and safety information;
- agree areas of responsibility and timetables;
- prepare the collection inventory and, if possible, reduce any backlog;
- provide a plan of the space to be surveyed, including a shelving plan.

Access:

- clear the area around the collection to be surveyed, removing empty packing cases and old showcases etc;
- ensure that all objects are on shelves or pallets;
- arrange security clearance and provision of keys, passes or supervision;
- inform members of staff about the project and arrange for the surveyor to have uninterrupted access to the space and collections.

Facilities:

- provide trolleys, trucks and ladders as necessary (remember your health and safety responsibilities);
- ensure there is adequate illumination in the survey areas;
- provide a large clear workspace;
- provide a suitable power supply, if required.

After the survey:

- assist the consultant, who may want to visit in order to check queries on the survey forms
- concerning identification, location, or to discuss some of the results;
- contribute to the analysis of the results by identifying areas of correlation that would be useful; supply related information, such as environmental data, that might be required;
- be prepared to comment on a draft of the report.

Using the Results of the Survey

Once the survey is completed and you have received the report, allocate some time to review the findings and decide how you will use of the results. Typical follow-on projects are:

Planning a programme of conservation work

Surveys are often the first step in developing a planned conservation programme. Use the survey to identify collections in greatest need of conservation and prioritise these for treatment. For example, if the survey shows that there is a serious insect infestation in one of your stores, you might decide to deal with that problem first

Preparing a grant application

Many of the grant-giving bodies such as the AMCs or the Heritage Lottery Fund (HLF) now expect

applications for conservation programmes or environmental improvements to be based on the

findings of a survey. If, for example, you are planning to apply for a grant for a new costume gallery and your survey showed that 400 hours of conservation work were necessary to make the collection suitable for display, you should include this information and how it was arrived at in your application. The survey may have also established the major causes of damage to the collection and indicate work that would improve the situation, such as the need to reduce light levels or install a dehumidifier.

Basis for tendering

Once you have an accurate picture of the amount of conservation work required on your collection, you can use the survey results to put the conservation work out to tender. Most specialist

conservators will not submit a tender for remedial conservation treatment without first subjecting the artefacts to a detailed examination. Therefore, this type of survey is most suitable for prioritising items for treatment (as mentioned above) or assessing general collection care work such as re-boxing or radiography of archaeological finds.

Follow-up surveys

A useful way to monitor the benefits arising from a survey is to repeat the process after a period of years. If you intend to do this comparative type survey you must collect exactly the same type of data as in the original survey, looking at the same collections in the same location.

Another type of follow-up survey is one that examines in greater detail a proportion of the collection. For example, if your initial survey has identified that your geological collection is in the poorest condition, you could re-examine this collection in more detail. A twostage survey will avoid collecting too much data about stable parts of the collection and will give the opportunity to involve another specialist.

Using In-house Staff or a Consultant

Only a relatively small proportion of UK museums now employs conservators. Those that do may wish them to carry out any collection condition surveys required. The arguments for and against this approach are presented below.

The advantages of using in-house staff are:

- in-house staff understand the role of the collection and the likely use that will be made of it;
- surveying a collection is an excellent way of getting to know it;
- staff who participate in the collection of data have greater faith in the results;
- observations made during the survey may provide information on other aspects of managing the collections;
- they are more familiar with the site;
- there are no additional security requirements;
- the survey can be carried out over a long period and this may fit better with the museum's other
- activities.

The disadvantages of using in-house staff are:

- they have an inherent bias because of their familiarity with the collections and the institution,
- and may be less objective;
- they are more aware of the consequences of the results, such as the impact on their workload or
- changes to established practices;
- they may not have the specialist expertise in the type of collection to be surveyed;
- they may be diverted from other important projects that the museum is committed to.

The advantages of using a consultant are:

- s/he is likely to have more experience of surveying collections than museum staff;
- s/he will agree a timetable and is likely to keep to it;
- the surveying process is less likely to disrupt the normal museum services.

The disadvantages of using a consultant are:

- the museum will need to allocate funds to pay the consultant;
- identifying and selecting a suitable consultant can be time-consuming;
- s/he is likely to be less familiar with the museum and its collections than the staff;
- once a consultant finishes a project, their knowledge and experience of carrying out collection condition surveys leaves with them.

Using a Combination

If your museum employs an in-house conservator, then working with a freelance conservator can give them a refreshing new perspective on the collection. The benefits of familiarity with the collections can be combined with the dispassionate approach of an independent conservator. If the museum does not have an in-house conservator it may be possible to commission a private conservator to undertake the survey and have them assisted by a member of staff. This will allow the conservator to pass on advice in an informal way about the collection as work progresses.

If some objects are packed in a complicated way the member of staff could prepare the collections in advance to speed up the process. Even if you commission two external conservators it may be useful to have a member of staff working alongside them. This would allow the conservators to explain problems as they arise and, perhaps, engender a greater sense of ownership of the final report and recommendations in the staff.

Further Reading

Dollery, D (1994) 'A Methodology of Preventive Conservation for a Large and Expanding and Mixed Archaeological Collection', *Preventive Conservation, Practice Theory and Research*, International Institute for Conservation: London.

Eden P, Dungworth N, Bell N and Matthews G (1998) *A Model for Assessing Preservation Needs in Libraries*, British Library Research and Innovation Report 125, British Library Research and Innovation Centre: London 84 - 110.

Grant A (1994) *Spectrum Essentials*, Museums Documentation Association: Cambridge.

Keene S (1996) *Managing Conservation in Museums*, Butterworth-Heinemann.

This contains detailed advice on the survey and examples of forms used by the author.

Kenyon J (1992) *Collecting for the 21 st Century: A Survey of Industrial and Social History Collection in the Museums of Yorkshire and Humberside*, Yorkshire and Humberside Museum Council: Leeds.

Checklist for Planning a Collection Condition Survey

There are practical issues associated with the survey that you need to consider. Use the simple checklist overleaf to ensure you have thought things through.

Make sure you are clear how you wish to allocate responsibilities. If you are working with a consultant this will help you to structure the brief.

Checklist

Survey format

- Who will design the survey format and questions?
- Will you use a standard survey form?
- If so have you identified a form to copy?
- Do you want the results on a disc?
- Will the database chosen for the survey be compatible with your software?
- Will you specify sampling method or allow the consultant to choose?
- What will the sample size be based on?

Access

- Will there limited hours of access?
- Have you informed the consultant of these?
- Will there be other people using the collection whilst the survey is being carried out?
- Have you informed the consultant of this?

Trial or pilot survey

- Will there be a trial survey?
- Will the same team undertake it?
- Will the results of the pilot study be incorporated into the final report?

Report

- Have you specified how you want the information to be analysed?
- Have you specified what the surveyor will provide comments on?
- Do you want recommendations presented as graphs, tables or narrative text, or a combination?
- Will you specify what percentage of time to be spent surveying and analysing?
- Do you want to receive the raw data as collected?
- Do you have deadlines for when the report must be presented?

Payment

- Will you pay by the day or by the project? (Depends on factors such as whether the consultant provides advice and how much support you provide).
- Are there to be different charging rates for time spent surveying and time spent writing the report?
- Will you pay the surveyors' expenses?
- Have you agreed when the invoices will be sent?