

## Chapter 3: Preservation: Getting Started

<b>A. Overview</b> .....	3:1
What is preventive care? .....	3:1
What is conservation treatment? .....	3:3
<b>B. Planning for Object Conservation</b> .....	3:4
Who is responsible for museum object conservation? .....	3:4
What are the NPS information resources for conservation? .....	3:7
What are some other sources for conservation information? .....	3:8
What do I need to do to develop a preservation program for my park? .....	3:9
<b>C. The Collection Management Plan</b> .....	3:10
Why should my park have a CMP? .....	3:11
What is the process for having a CMP done at my park? .....	3:11
What other kinds of surveys and plans will help me preserve collections? .....	3:13
<b>D. The Collection Condition Survey</b> .....	3:13
How do the CCS and the CMP overlap?.....	3:14
What are the steps involved in the survey process? .....	3:14
What format should the CCS have? .....	3:16
What is the Condition Field in ANCS+? .....	3:17
What other information can I add to the ANCS+ collection management program? .....	3:18
<b>E. Preservation of Historic Structures Housing Park Collections</b> .....	3:19
<b>F: Glossary</b> .....	3:20
<b>G: Selected Bibliography</b> .....	3:22
<b>H. Web Resources</b> .....	3:22
<b>List of Figures</b>	
Figure 3.1. Different Roles of Curator/Archivist/Collection Manager and Conservator in Object Conservation Management in the Museum .....	3:6
Figure 3.2. Sample Scope of Work for Requesting a Collection Condition Survey .....	3:23
Figure 3.3. Sample Project Management Information System (PMIS) Statement for Requesting Conservation Treatment Based on CCS .....	3:26

# CHAPTER 3: PRESERVATION: GETTING STARTED

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## A. Overview

This chapter will introduce you to one of the main goals of the National Park Service museum program — to preserve museum objects, specimens and archival collections. These collections are natural and cultural resources for our parks. They provide baseline information and are resources for on-going study and use over time. For example, historic objects and archival collections document the lives and history of people and groups throughout the nation. Natural history specimens and their associated documentation record evolving park ecosystems and provide information that helps parks manage natural resources. Archeological collections and their associated documentation record archeological activity and preserve data (artifacts, reports, photographs, maps) for future analysis.

The NPS uses the term **object conservation** to describe the activities that preserve museum collections. The use of the term “object” distinguishes these activities from conservation of the environment. Object conservation activities include examination, documentation, treatment, and preventive care, supported by research and education. You can find definitions of these and other terms in the glossary at the end of this chapter. NPS policies for the treatment of museum objects, excerpted from the NPS *Management Policies*, are in Appendix A.

This chapter will give you information on:

- preventive care and treatment for museum collections
- NPS resources for preventive care
- how to plan for object conservation
- the role of a collection management plan (CMP) in conservation planning
- the role of a collection condition survey (CCS) in conservation planning
- balancing preservation of historic structures and museum objects

We use museum object conservation to preserve objects by minimizing chemical and physical change. In the NPS, object conservation is an ongoing process of **preventive care** supplemented by **conservation treatment**.

### 1. *What is preventive care?*

The role of preventive care (also known as preventive conservation) is to avoid, block, or minimize the **agents of deterioration**. By using preventive care techniques you can limit the imperceptible deterioration that occurs on a daily basis (but is cumulative over time) and the catastrophic damage that occurs occasionally. Only when preventive care techniques are not implemented or objects are inherently unstable, is conservation treatment necessary.

The agents of deterioration are forces that act upon objects causing chemical and physical damage. The Canadian Conservation Institute has defined the agents of deterioration as:

- **Direct physical forces**, such as shock, vibration, and abrasion that can break, distort, puncture, dent, and scratch all types of objects. These forces may be *cumulative*, such as improper handling or support or *catastrophic*, such as earthquake, war, or shelf collapse.
- **Thieves, vandals, or careless individuals** who misplace objects. Some of these agents are *intentional*, such as criminals who steal or disfigure objects. Others are *unintentional*, such as staff or users who misfile objects.
- **Fire** that destroys, scorches, or deposits smoke on all types of objects.
- **Water** that causes efflorescence in porous materials, swells organic materials, corrodes metals, delaminates and/or buckles layered components, and loosens joined components.
- **Pests**, such as *insects* that consume, perforate, cut, graze, tunnel and/or excrete which destroys, weakens, disfigures, or etches organic materials. Pests also include *vermin* such as birds and other animals that gnaw organic materials and displace small objects, foul objects with feces and urine and *mold and microbes* that weaken or stain objects.
- **Contaminants** that disintegrate, discolor, or corrode all types of objects, especially reactive and porous materials. This includes *gases* (such as pollution, oxygen), *liquids* (such as plasticizers, grease), and *solids* (such as dust, salt).
- **Radiation**, including both ultraviolet radiation and visible light. *Ultraviolet* radiation disintegrates, fades, darkens, and/or yellows the outer layer of organic materials and some colored inorganic materials. *Unnecessary visible light* fades or darkens the outer layer of paints and wood.
- **Incorrect temperature** that can be *too high* causing gradual disintegration or discoloration of organic materials; *too low* causing embrittlement, which results in fractures of paints and other polymers; or *fluctuating* causing fractures and delamination in brittle, solid materials. Fluctuations in temperature also cause fluctuations in RH.
- **Incorrect relative humidity** that can be *damp (over 65% RH)*, causing mold and corrosion, or *above or below a critical value*, hydrating or dehydrating some minerals and corroding metals that contain salts. Organic materials will gradually disintegrate and discolor, especially materials that are chemically unstable at any RH level *above 0%*. *Fluctuating* RH will shrink and swell unconstrained organic materials, crush or fracture constrained organic materials, cause layered organic materials to delaminate and/or buckle, and loosen joints in organic components.

Most objects are affected by a variety of these agents of deterioration at the same time. As you improve preventive care of your collections, you will be addressing each of the agents of deterioration through a variety of policies and procedures. Later chapters will address how you do this.

The park curator has primary responsibility for preventive care of the museum collections. Preventive care requires vigilance by park curators to ensure that damage does not occur. This handbook contains the information you will need to protect your collection by developing a variety of park procedures and programs for preventive care. In order to carry out a proper preventive care program you should:

- know the causes and recognize the symptoms of object deterioration
- inspect collections on a regular basis
- monitor and control the museum environment (relative humidity, temperature, light, pests, dust, and other pollutants)
- practice proper techniques for the handling, storage, exhibit, packing, and shipping of objects
- provide appropriate security and fire protection for collections
- prepare and be able to implement emergency management plans for collections

This introductory chapter will describe how to identify your preventive conservation needs and develop a strong program with a Collection Management Plan (CMP). It will also tell you how to plan for object conservation treatment, using Collection Condition Surveys (CCS) when preventive care is not enough.

## 2. *What is conservation treatment?*

**Conservation treatment** is the deliberate alteration of the chemical and/or physical aspects of an item from a museum collection, in order to prolong the item's existence. Treatment may consist of stabilization and/or restoration. **Stabilization** consists of those treatment procedures applied to maintain the integrity of a museum object and to minimize further deterioration. For example, when a conservator washes paper, the washing removes acidic by-products of deterioration. This is a method of stabilization. **Restoration** consists of those treatment procedures intended to return cultural property to a known or assumed state, often through the addition of non-original material. For example, to restore a broken ceramic pot a conservator might glue broken pieces together and fill the losses with plaster.

You should consider conservation treatment in the following cases:

- when preventive care measures are not enough to reduce the rate of deterioration to a tolerable level, such as deteriorating plastic objects
- when deterioration has proceeded to a point where the object is extremely fragile and is in danger in any circumstances, such as when paint is flaking from a picture

- when stabilization or restoration is required for exhibit
- when stabilization or restoration is required for research

Work with your regional/support office (SO) curator to decide whether conservation treatment is required. In the National Park Service, following NPS Management Policies, we keep conservation treatment to a minimum. This approach reduces the chances of compromising the aesthetic, archeological, cultural, historical, physical, religious, or scientific integrity of objects. We emphasize preserving original materials and minimizing restoration.

*Any person who performs conservation treatments for the NPS must agree to adhere to the American Institute for Conservation of Historic and Artistic Works (AIC) Code of Ethics and Guidelines for Practice. A copy of this Code of Ethics is included in Appendix D. You should include this requirement in all requests for proposals (RFQs) or contracts with conservators.*

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## B. Planning for Object Conservation

### 1. *Who is responsible for museum object conservation?*

Preventive conservation is the responsibility of everyone who works in and around museum collections, including archivists, museum technicians, collection managers, conservators, curators, interpreters, maintenance personnel, preparators, and researchers.

The **collection management specialist (curator, archivist, collection manager)** is the person with primary responsibility for the day-to-day management of the museum collection. The duties of these professionals include:

- acquisition
- documentation
- preventive care (preventive conservation)
- interpretation and exhibits
- research and publication

A curator has expertise in material culture studies and is trained and skilled in the history and philosophy of museums, as well as the practical aspects of preventive conservation.

The **conservator** is trained and skilled in the theoretical and practical aspects of preventive conservation and conservation treatment. Most conservators specialize in the treatment of specific groups of objects (for example, archeological objects, books, ethnographic objects, natural science specimens, fine and decorative art objects, photographic materials, paintings, paper, sculpture, textiles, or wooden artifacts). There is some

overlap among these groups, so one conservator may work on a range of these materials.

The collection management specialist (such as a curator, archivist or collections manager) and the conservator work together and with other professionals to develop a successful conservation program. Conservators are responsible for recommending and carrying out conservation treatments. Untrained staff should **NOT** attempt to do treatments. However, the collection management specialist has the ultimate responsibility for deciding on the care and management of the collections.

The roles of the collection management specialist and the conservator in object conservation management are illustrated in Figure 3.1.

Scientific collections (such as natural science and archeological collections) recovered in the field are often prepared by the collector who has expertise in an academic discipline (paleontology, mammology, archeology). Many techniques are used to uncover, clean, sample, identify, stabilize, and preserve materials so they can be used for research and exhibit. For example, most reptiles and fish are prepared by stabilizing specimens in formaldehyde and storing them in alcohol in the field, so that decomposition does not occur. Archeological collections are usually washed and sometimes treated with other chemicals to remove deposits from burial so surfaces can be examined. Within the museum, individuals called preparators, often continue to work on collections— most notably with paleontological and biological collections. Many preparators also are directly responsible for collections care.

All preparation techniques used before accessioning an object, and later in the museum, directly affect the long-term preservation of the specimen or object. There are also many health and safety concerns that occur because of preparation techniques. The curator/collections manager and the conservator must work with others who prepare objects and specimens so that from the time they are collected, thoughtful choices are made that help to preserve them for the long-term. (See the *Conserve O Gram* series for information on many of these concerns.)

<i>Preventive Care</i>	
<i>Curator/Archivist/Collections Manager</i>	<i>Conservator</i>
<ul style="list-style-type: none"> <li>• Monitors and assesses condition of collections</li> <li>• Monitors and evaluates museum environment and alerts staff to signs and causes of deterioration</li> <li>• Practices proper methods and techniques for storing, exhibiting, handling, packing and shipping of objects, and pest management</li> <li>• Develops and implements ongoing Integrated Pest Management (IPM), and housekeeping/maintenance program for collections</li> <li>• Prepares emergency operation plan for museum collections</li> </ul>	<ul style="list-style-type: none"> <li>• Assesses condition of objects; conducts Collection Condition Surveys</li> <li>• Alerts staff to signs and causes of deterioration</li> <li>• Provides technical guidance on museum environment, storage, exhibits, handling, packing and shipping, pest management</li> <li>• Assists in development of Integrated Pest Management (IPM) and housekeeping/maintenance programs</li> <li>• Assists in development and preparation of emergency operation plans</li> </ul>
<i>Conservation Treatment</i>	
<i>Curator/Archivist/Collections Manager</i>	<i>Conservator</i>
<ul style="list-style-type: none"> <li>• Documents history, significance, value, and proposed use of each object to be treated</li> <li>• Develops and monitors contracts for conservation services</li> <li>• Assesses, in consultation with conservator, the suitability of written treatment proposals and authorizes treatments</li> <li>• Monitors progress of treatment for each object</li> <li>• Ensures continuing care for treated objects</li> </ul>	<ul style="list-style-type: none"> <li>• Examines and documents conditions and problems of objects and collections</li> <li>• Prepares treatment proposals for curatorial review and approval</li> <li>• Performs suitable treatments</li> <li>• Documents treatments performed</li> <li>• Recommends methods for the future maintenance and care of treated objects</li> <li>• Performs analysis for research and interpretation</li> </ul>

**Figure 3.1. Different Roles of Curator/Archivist/Collection Manager and Conservator in Object Conservation Management in the Museum**

2. *What are the NPS information resources for conservation?*

There are a number of information resources you can refer to when developing your knowledge of conservation and preventive care:

- *NPS Museum Handbook*, Part I (*MH-I*) has a wide variety of information on all the essential parts of your preventive conservation program. Review the chapters in this handbook for information on techniques for setting up your preventive maintenance programs, including security and fire protection, pest management, emergency planning, environmental monitoring, storage, and handling, packing and shipping. It also includes appendices with specific information on the preventive care of the variety of materials you will have to care for in your collection, such as archeological or natural history objects, metals, ceramics, and glass.
- *Conserve O Gram (COG)* leaflets are short technical leaflets on specific topics in collection care and planning, published by the Museum Management Program (MMP). These leaflets are intended to expand and update the information contained in the *MH-I*. These leaflets cover a wide range of subjects including:
  - agents of deterioration
  - archeological objects
  - archival and manuscript collections and rare books
  - ceramics, glass, and plaster objects
  - ethnographic objects
  - furniture and wooden objects
  - leather and skin objects
  - metal, and organic and metal objects
  - natural history specimens
  - museum collection preservation
  - museum collection storage
  - museum exhibits
  - paintings
  - packing and shipping museum objects
  - paper objects
  - photographs

- security, fire, and curatorial safety
- stone objects
- textile objects

The MMP provides all parks with copies of *COG* leaflets. They are also available on the web at:

<<http://www.cr.nps.gov/csd/publications/index.htm>>.

- *NPS Tools of the Trade*, published by the MMP, is a catalog of curatorial supplies and equipment. It includes museum record keeping materials and forms, storage containers, specialty curatorial items (white cotton and latex gloves, polyethylene drawer liners), natural history supplies, museum cabinetry, shelving and racks, and environmental monitoring and control apparatus. *Tools of the Trade* can also give you instructions on how to obtain museum supplies and equipment, get answers to questions about storage techniques, meet special storage requirements, properly use materials and equipment, and find source information for purchasing supplies or equipment. The MMP updates this catalog periodically. Copies have been distributed to all regional offices, parks, and centers. If you don't have this publication, contact the MMP. Keep this catalog handy for reference.
- ANCS+ is the collection management documentation system provided to all parks for cataloging and other documentation purposes. This program contains associated modules and supplemental records that will allow you to incorporate information provided by a conservator. This information includes condition description, and treatment reports and maintenance recommendations. The conservation module (to be released in 2000) helps parks and conservators efficiently incorporate survey, treatment, and analysis information into object documentation.
- There are several conservation laboratories in the NPS that work on museum objects beyond individual parks. Conservators from these labs can assist with surveys, carry out treatments and give you other advice about conservation and conservation contracting. The current labs are at:
  - Harpers Ferry Center, Harpers Ferry, West Virginia
  - Northeast Cultural Resources Center, Lowell, Massachusetts
  - Western Archeological and Conservation Center, Tucson, Arizona

3. *What are some other sources for conservation information?*

There are a wide variety of resources for information on conservation outside the NPS. To start, review the resources listed in the bibliography and web sources.

The American Institute for Conservation of Historic and Artistic Works (AIC) administers the *Guide to Conservation Services*. This free database service can provide you with the names of conservators in your region who have the expertise you need for your project. For information contact AIC at (202) 452-9545 or [InfoAIC@aol.com](mailto:InfoAIC@aol.com).

There are a number of regional conservation laboratories that can help you. To locate the closest regional lab contact the MMP at (202) 343-8142 or your regional/support office (SO) curator.

4. *What do I need to do to develop a preservation program for my park?*

There are a variety of actions to take in planning and carrying out your preservation program.

**Remember:** *Museum preservation is an ongoing process, not a one-time effort.*

When you have a well-planned program, you use staff time and funding more efficiently. Your program should include the following actions:

- Document the collection as required by the NPS *Museum Handbook*, Part II: Museum Records (*MH-II*).
- Conduct a self-evaluation to identify deficiencies using the NPS Checklist for Preservation and Protection of Museum Collections (see Appendix F). Use the Automated Checklist Program (ACP), one of the utilities in ANCS+, to fill out and submit your Checklist. You must keep the Checklist up-to-date. The Checklist is also used for Government Performance and Results Act (GPRA) reporting requirements. Use reports from the ACP to provide the “number of standards met” and the “percentage of standards met” to report accomplishments under GPRA. To get more information about the ACP, see the *ANCS+ User Manual*, Appendix G: The Automated Checklist Program.
- Implement a program of preventive care. Start your program by correcting deficiencies in the ACP and developing programming documents to implement recommendations in a Collection Management Plan (CMP) and other surveys. As you correct each deficiency, you will develop your preventive care program. The parts of a program will include:
  - monitoring and controlling the museum environment
  - using proper techniques for the handling, storage, exhibit, and packing and shipping of objects
  - providing security and fire protection
  - planning for emergency operations
  - inspecting objects on a regular basis
  - applying for conservation treatment when necessary
- Complete a Collection Management Plan (CMP) to assess your park’s collection management program and to provide specific guidance on improving the care of the collections. Refer to Section C for additional information on the CMP.

- Complete a Collection Condition Survey (CCS) of the collection after examining the objects and assessing condition and treatment needs. Based on this report and available information regarding use and significance of each object, develop a prioritized object conservation treatment list. Refer to Section D for additional information on the CCS.
- If you have a historic structure housing museum objects, assess the condition and preservation needs of the structure. You need to ensure that the actions you take to preserve the museum objects don't harm the historic structure. You should follow the principles outlined in the New Orleans Charter for Joint Preservation of Historic Structures and Artifacts. You can find the Charter on the web at <http://palimpsest.stanford.edu/bytopic/ethics/neworlea.html>. See Section E for more discussion about preservation of collections in historic structures.
- Prepare budget documents to improve and maintain the object conservation program. You can find information on programming and budgeting in Chapter 12: Programming, Funding, and Staffing.
- Develop and implement training sessions or obtain external training for park staff who handle and work with museum objects.

The rest of this chapter will describe how to complete the Collection Management Plan (CMP) and Collection Condition Survey (CCS). Use the CMP and the CCS as planning documents to help you establish and implement a long-term, ongoing program for the preventive care and treatment of your collection. These documents will help you budget time, funds, and staff to address preservation needs. These plans, however, will only be useful if you are committed to implementing the recommended actions.

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## C. The Collection Management Plan

A Collection Management Plan (CMP) is a review of your park's collection management program to identify problems and make recommendations on the management and care of the collections. To prepare the plan, use consultants from outside the park that have expertise in a variety of areas. They can advise you on how to improve your program efficiently and effectively. A Collection Management Plan will give you advice on issues such as your:

### Scope of Collection statement (SOCS)

- museum records and documentation
- preventive care issues, including environmental conditions, storage, fire and security protection, and emergency management
- collections accessibility and use

- staffing and funding needs
- archival and manuscript collections
- access and use

Refer to Appendix F for an example outline of a CMP.

1. *Why should my park have a CMP?*

A CMP gives you a set of guidelines and recommendations for improving the collection management at your park. You will use it as a prioritized planning document, to plan tasks and to identify long-range curatorial staffing needs. By using the CMP you will be able to develop a series of projects that will allow you to:

- document your collections
- care for them in a way that will best preserve them
- make them available for use

A CMP is a framework that will help you organize the variety of tasks that you are responsible for as the park curator.

2. *What is the process for having a CMP done at my park?*

Follow these steps to get a CMP done.

**Request the plan.**

Include a project statement in the park Resource Management Plan (RMP) and in the NPS Project Management Information System (PMIS). You can consult the regional/SO curator for assistance in requesting a CMP. Prepare and submit a project statement to PMIS. Refer to Chapter 12 for guidance on programming and budgeting for museum collection management.

**Select a planning team.**

To ensure objectivity and diversity of views, select a team of NPS or contract museum professionals with expertise appropriate to the nature and needs of the park's collections. The team is generally made up of curators or collections managers and can also include archivists and conservators. The regional/SO curator often assists with the plan. The CMP team will visit your park and collect information from park staff, the regional/SO curator, and other regional specialists, as appropriate.

**Prepare and review the plan.**

Assign a team coordinator from outside the park. This coordinator will have a variety of duties including:

- coordinating selection of team members and planning the site visit
- coordinating pre-visit activities, such as preparing a pre-visit questionnaire for park staff and collecting previous planning documents
- coordinating on-site activity to ensure that the team collects adequate and appropriate information

- preparing a brief summary of findings for the close-out meeting
- as requested, writing a trip report for the region and park that outlines some of the basic findings and recommendations, including those that should be implemented prior to the completion of the CMP
- reviewing and editing the draft plan and forwarding it to the park for review and approval

The duties for each team member include:

- reviewing all relevant park documents
- participating in the site visit
- evaluating collections, facilities, park procedures and record keeping
- writing assigned CMP sections and submitting them to the team coordinator by the deadline
- revising sections as necessary based on comments

The team submits a review draft of the CMP to the park and region. They may also submit a draft to the MMP and other WASO offices as appropriate. A second draft is prepared incorporating comments. The Superintendent approves the plan upon recommendation by the regional/SO curator and concurrence of the Regional Deputy Director.

**Distribute the final plan.**

Distribute your CMP to all offices and repositories listed in Director's Order #28: Cultural Resources Management Guideline, Appendix D: Distribution/Availability of Final Cultural Resource Reports. There may be other offices that are also designated by your park or region for distribution.

**Note:** Sensitive information, such as security systems and the location of museum collection storage facilities, is restricted information and not released to all offices.

**Implement the plan.**

The plan will list a variety of tasks that will take time, and often money, to carry out. Use these tasks to develop a series of goals that you can strive to accomplish. You will finish some tasks quickly; others require long-term planning and effort. You should review the plan regularly to be sure you are completing necessary actions. It may be necessary to update the plan as your situation changes; for example, as you add new collections or build new facilities. You should consult with your regional/SO curator about options for updating your plan.

3. *What other kinds of surveys and plans will help me preserve collections?*

There are several other planning tools that you may find useful. Each of these surveys focuses on one aspect of **preventive care** and can give you more in-depth information. Some of these reviews are requirements on the Checklist for Preservation and Protection of Museum Collections. These documents include:

- security survey, which helps you plan for appropriate security systems (Checklist question H.2). See Chapter 9: Security and Fire Protection.
- fire protection survey, leading to a structural fire management plan (Checklist question H.3). See Chapter 9: Security and Fire Protection.
- storage survey, leading to a Collection Storage Plan (CSP) (Checklist question H.7). See Chapter 7: Museum Collections Storage.
- archival survey, to identify official and non-official records, provide a collection level description of materials, develop a draft processing plan, review legal issues, identify preventive care issues for the archival and manuscript collections, and provide planning advice for future work. See *MH-II*, Appendix D: Archives and Manuscript Collections.
- general condition surveys, to evaluate the overall condition of collections and make recommendations about how to improve preventive conservation practices. This survey may be part of a CMP or a stand-alone document.
- written recommendations by a professional, for improving the museum environment (temperature, relative humidity and light) based on ongoing park environmental monitoring (Checklist question H.1). See Chapter 4: Museum Collections Environment.
- The Collection Condition Survey (CCS) **identifies condition and treatment needs** and may include preventive care recommendations (Checklist question H.6.).

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#### D. The Collection Condition Survey

A Collection Condition Survey (CCS) is a report on the status of the condition of individual or groups of like items in a park's museum collection. Conservators specialize in different types of materials, so you should select a conservator who has the right expertise for the segment of your collection to be surveyed. For example, you can request that a conservator do a survey of your historic photographs to determine treatment needs and record baseline data for future assessment of deterioration. You might ask another conservator to examine your visitor center to evaluate the objects on exhibit for signs of deterioration and to evaluate the mounts, lighting, case design, and construction. The survey report may also include recommendations about preventive care needs, such as storage techniques, environmental conditions, and pest control.

Over a period of time, you may need several different surveys by conservators who specialize in different types of materials. Your needs will depend on the size and type of your collections and your park programs and priorities.

<p><i><b>You must use a qualified conservator to do a Collection Condition Survey.</b></i></p>
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If you are contracting with a conservator from outside the NPS, get recommendations and descriptions of previous work to be sure the individual is qualified.

1. *How do the CCS and the CMP overlap?*

You should request a CCS only after you have a CMP. Conservation treatment is not appropriate when collections are not documented and basic preventive care programs are not in place. The CMP and the CCS can both contain information on preventive care. Preventive care must be taken into account when carrying out all of your duties with the museum collections. Recommendations on preventive care included in a CMP usually focus on general conditions in exhibit and storage areas and curatorial specialists other than conservators may make these recommendations. The preventive care recommendations in a CCS will advise you how to stop the deterioration seen in the item-by-item survey.

2. *What are the steps involved in the survey process?*

**Request the survey.**

If you would like to request a CCS, consult the regional/SO curator for assistance. Refer to Chapter 12 for guidance on programming and budgeting. Be sure to include the need for a conservation survey in the park's RMP and in PMIS. See Section C.2.

**Select the conservator(s).**

A NPS or contract conservator or team of conservators will visit your park to make observations and collect information that goes into the CCS. The size of the team depends on the types of materials to be examined at one time. Conservators conducting a CCS must be specialists in the treatment of the specific class of objects they are examining (for example, furniture, textiles, metals, archeological objects, paper, books, paintings, ethnographic objects, or natural history specimens).

You should be sure that the conservator you select has appropriate knowledge and experience to evaluate your collection. Gather information to be sure you get a conservator with appropriate expertise.

Ask the following questions:

- What kind of training do you have? Conservators get training both through academic departments and internships. They should be willing to describe to you how their training is appropriate to your park's needs.
- How long have you been a conservator? You want to work with conservators who have finished their training and worked professionally for at least three years.
- Is your business mostly conservation?
- Have you worked on this type of material/done this kind of survey before?
- What museum conservation organizations do you belong to?
- Are you available when I need you?
- Can you give me references and contacts with previous clients?

- Do you agree to follow the AIC Code of Ethics and Guidelines for Practice?

You are looking for a knowledgeable, experienced conservator who has worked on the type of material that you have in your collection. If a conservator agrees to follow the AIC Code of Ethics and Guidelines they are agreeing to follow current and generally accepted standards and practices of the conservation profession.

See Figure 3.2 for an example Scope of Work (SOW).

**Conduct the survey.**

The conservator will need to work directly in your collection storage area in order to see both the objects and the conditions in which they are stored. Each conservator will conduct the survey a little differently, but some responsibilities you should expect include providing:

- a staff member to work with the conservator to:
  - access collection storage rooms, vaults, cabinets, shelves, and other locations where objects are stored
  - assist in moving heavy or unwieldy objects
  - answer questions about environmental monitoring, IPM programs, preventive maintenance, collection use, plans for future acquisition and deaccessioning and other information as necessary
- a suitable workplace near the objects
- catalog, accession, and previous conservation (treatment and survey) records when required
- access to ANCS+

This would be required if the SOW requires information from the survey to be input directly into catalog records. ANCS+ is also a convenient way to provide access to catalog, accession, and conservation records that are available in the database.

**Prepare and review the CCS report.**

At the start of the project, agree when a draft report will be available for review. One month is usually a reasonable amount of time to produce a draft report. Review the draft carefully and request additional information and clarification where necessary. The conservator should be able to finalize the report within another month, after all NPS reviews are finished.

**Distribute the report.**

Distribute the CCS to the park and the regional/SO curator and to others designated by the park and region.

**Implement the Collection Condition Survey report.**

The CCS report documents the condition of the objects that the conservator examined, identifies treatment needs, and sets priorities for treatment based

solely on physical condition and risk. You must evaluate this information in terms of curatorial priorities, such as significance, interpretive programs, and research needs in deciding which objects to treat. Balancing preservation with access and use allows you to develop a program for conservation treatment.

Park curatorial staff should implement the preventive care recommendations in a CCS. You will need to hire a conservator to provide treatments.

**Add CCS data on individual objects to collection records.**

Section D.5 discusses how you can incorporate this information into ANCS+ records. Adding this information to ANCS+ ensures that it will be maintained with other information about the object for the long-term.

3. *What format should the CCS have?*

CCS reports will vary in the information they provide. Because they may give general preventive care recommendations in addition to item-by-item condition assessments, the structure will reflect the information they contain. The CCS **must** include the following information:

- Introduction: The report should contain a narrative introduction that gives general information about the park visit (for example, park name, dates, name of conservator(s), and explanations of all technical terms).
- General recommendations: If appropriate, the report will include general recommendations and preventive care tasks.
- Item-by-item assessments: Individual object assessments may be either in narrative or checklist format. However, they must include information to complete the Condition field on the catalog record. See a description of this field below.
- The report should incorporate draft language that can be incorporated into Resources Management Plan (RMP) and/or Performance Management Information System (PMIS) statements. See Figure 3.3 for examples. For additional examples, see *Project Statements for Museum Collections* prepared by the Museum Services Division, Southeast Regional Office, January 1994. This document was supplied to all parks. It is also available on disk from most regional/SO curators.

The conservation module in ANCS+ (to be released in 2000) allows you to incorporate the information on condition and maintenance collected in conservation surveys directly into ANCS+ collection management records. Guidance on using the Conservation Module is provided in the *ANCS+ User Manual*. You can also incorporate information from CCS reports manually in ANCS+.

4. *What is the Condition Field in ANCS+?*

As part of the condition assessment of the CCS ask the conservator to supply you with the standard NPS abbreviation for the Condition field on the Collection Record for each item examined. Incorporating this information into your catalog records will help parks, centers, and the Museum Management Program make more accurate estimates of the condition of all park collections. It also allows you to track change in condition over time.

For objects, use one term from each of the two criteria groups below:

<b>Group I</b>		<b>Abbreviation</b>
Complete:	100% of object present	COM
Incomplete:	more than 50% and less than 100% of object present	INC
Fragment:	less than or equal to 50% of object present	FRG
<b>Group II</b>		
The following descriptions are for the object in hand regardless of whether it is complete, incomplete, or fragmentary. Note that an object can be incomplete, yet still be in excellent or good condition.		
		<b>Abbreviation</b>
Excellent:	No damage or deterioration. No treatment needed; no change will occur with good preventive conservation practices in place (for example, a pristine porcelain plate).	EX
Good:	Minor damage and no active deterioration. No change will occur with good preventive conservation practices. Minor cosmetic treatment may be needed before exhibit (for example, many historic objects that have been used.)	GD
Fair:	Some damage and/or slow but active deterioration. Treatment may be needed to stabilize or before object is displayed (for example, a decorative ceramic object with losses to the rim, or slowly rusting iron objects).	FR
Poor:	Significant damage and/or active deterioration. Treatment is needed to prevent additional damage or deterioration (for example, a table with one leg missing, making it structurally unstable or an archeological copper alloy object with "bronze disease").	PR

Entries are made using a slash between each term, such as INC/FR.

Examples:

- An unbroken drinking glass with no surface deterioration and no deposits would be COM/EX.
- A single archeological painted ceramic sherd that had been abraded during burial would be FRG/GD.
- A chest of drawers with lifting and lost veneer would be INC/FR.
- A leather saddle with red rot would be COM/PR.

5. *What other information can I add to the ANCS+ collection management program?*

The Conservation Module of ANCS+ (to be released in 2000) provides a way for parks to easily extract data from NPS and contract conservators' condition assessments and include that data in the collection management records. Instructions for using the Conservation Module are included in the *ANCS+ User Manual*. Until this module is released there is still some information that can be included in catalog records. You can request that conservators input this data (which may add cost to the

contract), provide it in a format that can be transferred electronically, or input it into records yourself.

**Condition description:** Depending on the style of survey the conservator does you may be able to transfer condition description information to the Condition Description (Cons Desc) field on the catalog record. So me surveyors will use a narrative form that will be simple to cut and paste into the field. Other conservators will use a checklist form. If you want to be able to transfer information, be sure to incorporate it as a requirement in your SOW and contract. When the Conservation Module is released, this information can be incorporated automatically.

**Preservation Supplemental Record:** You can use the Preservation supplemental record in ANCS+ to record a treatment priority from the surveyor. For information see the NPS *ANCS+ User Manual*, Chapter 3: Supplemental Records, XIV Preservation Supplemental. You can record that the object was surveyed by using S for "Surveyed/Not Treated" in the Treatment By field. You can also record any treatment priority that the conservator supplies in the Priority field. When the Conservation Module is released, this information can be incorporated automatically.

**Maintenance Associated Module:** You can use this module to record regular maintenance that is recommended by the surveyor. This module will help you develop schedules for carrying out and documenting maintenance treatments. For example, if a conservator recommends monthly vacuuming of all upholstered furniture on display, you should record it here. For information see the NPS *ANCS+ User Manual*, Chapter 4: Associated Modules, VI Maintenance Associated Module. When the Conservation Module is released, this information can be incorporated automatically.

## E. Preservation of Historic Structures Housing Park Collections

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Your museum collections may be housed in a park structure that has great historic significance of its own. Historic structures have their own preservation needs. These needs may be different from the needs of the museum objects. For example, the environment that best preserves museum objects often differs from the best environment to preserve the fabric or envelope of the structure. While managing museum objects, you should keep in mind the nature and significance of the historic structure, too.

There are a number of examples to illustrate how using a historic structure to house museum objects may cause more wear on the structure than its original use:

- Installation of museum exhibits or storage areas may impose loads or require physical design changes to the structure in conflict with its original design and historic integrity.
- Controlling relative humidity levels to strict object standards may cause serious damage to the structure because of condensation within walls.
- Installation and operation of modern mechanical, electrical, plumbing, security, and fire detection and suppression systems may require changes that impact both the historic and structural integrity of the structure.

If you plan to alter a historic structure to improve the care of your collections, you should seek the assistance of other curators, conservators, historical architects, and preservation engineers. Consider the following factors simultaneously in your decision-making process:

- the nature, condition, and preservation needs of the museum collection
- the nature, condition, and preservation needs of the structure housing the museum collection
- the effects of the planned use (for example, interpretive programs) on the structure and the museum collections

The concerns for preserving artifacts and historic structures that house them have led to the development of a set of principles that have been published as the New Orleans Charter for Joint Preservation of Historic Structures and Artifacts. You can view the charter on the web at <http://palimpsest.stanford.edu/bytopic/ethics/neworlea.html>. Use these principles when developing your own preventive care projects for museum collections in historic structures in your park.

You must have a Historic Structure Report (HSR) completed prior to a major intervention (for example, environmental control system, intrusion detection system, fire detection/suppression system). Additionally, any

project, activity, or program that can result in changes in the character or use of historic properties that meet National Register criteria are subject to Section 106 review (36 CFR 800). Consult with your park or regional/SO office historical architect and refer to D.O. #28: Cultural Resource Management Guideline for guidance.

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## F. Glossary

**Agents of deterioration** – those agents that act upon museum artifacts to cause physical and/or chemical changes that limit their lifespan due to deterioration or damage. The agents are listed in Section A.1.

**Archivist** – a professional responsible for managing and providing access to archival and manuscript collections

**Collections Manager** – a professional responsible for managing and providing access to museum collections

**Conservator (museum object)** – a person trained in the theoretical and practical aspects of preventive conservation and in performing treatments to prolong the lives of museum objects. Most conservators specialize in specific classes of objects (for example, paintings, furniture, books, paper, textiles, metals, ceramics and glass, architecture, ethnographic objects, archeological objects, photographs). They formulate and implement conservation activities in accordance with an ethical code such as the AIC Code of Ethics and Guidelines for Practice.

**Curator** – in the NPS, a person professionally responsible for the management, preservation, and use of museum objects/specimens. Collection management responsibilities include acquisition and disposal, documentation and cataloging, preventive conservation, storage, access, interpretation and exhibition, and research and publication. Often the curator is a discipline or material culture specialist (for example, archeology, history, biology, fine arts, Civil War weapons). Curators on park staffs who work directly with collections are known as museum curators; curators in other offices generally are known as staff curators. In the absence of archivists, curators are normally responsible for historic documents.

**Object Conservation** – measures taken to prolong the life of a museum object and its associated data

**Preservation** – the act or process of applying measures to sustain the existing form, integrity, and material of an object by activities that minimize chemical and physical deterioration and damage and prevent loss of information; primary goal of preservation is to prolong the existence of cultural property

**Preventive Care (or Preventive Conservation)** – non-interventive actions taken to prevent damage to and minimize deterioration of a museum object. Such actions include monitoring, recording, and controlling environmental agents; inspecting and recording the condition of objects; establishing an integrated pest management program; practicing proper handling, storage, exhibit, housekeeping and packing and shipping techniques; and incorporating needed information and procedures about objects in emergency operation plans.

**Reformatting** – for preservation, producing a copy of an original item or copy in the same or a different format to preserve the information it contains. Making a copy negative or digital copy of an original photographic negative is an example of reformatting.

**Restoration** – interventive treatment action taken to bring an object as close as possible to its original or former appearance by removing accretions and later additions and/or by replacing missing elements

**Stabilization** – interventive treatment action taken to increase the stability or durability of an object when preventive conservation measures fail to decrease its rate of deterioration to an acceptable level or when it has deteriorated so far that its existence is jeopardized

**Treatment** – the deliberate alteration of the chemical and/or physical aspects of museum objects, aimed primarily at prolonging their existence; treatment may consist of stabilization and/or restoration

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## G. Selected Bibliography

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- Museum Management Program. *Conserve O Gram*. Washington, D.C.: National Park Service, n.d.
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- Thompson, John M.A. *Manual of Curatorship: A Guide to Museum Practice*. London: Butterworths, 1992.

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## H. Web Resources

### National Park Service Resources

- Museum Management Program: <<http://www.cr.nps.gov/csd/>>
- National Center for Preservation Technology and Training: <<http://www.ncptt.nps.gov/>>
- Harpers Ferry Center Conservation: <<http://www.nps.gov/hfc/hfc-doc.htm>>

### Other Resources

- Conservation On-Line: <<http://palimpsest.stanford.edu/>> (Almost all conservation and preservation resources can be reached through this site.)
- American Institute for Conservation of Historic and Artistic Works (AIC): <<http://palimpsest.stanford.edu/aic/>>
- Canadian Conservation Institute (CCI): <<http://www.pch.gc.ca/cci-icc/>>

**SCOPE OF WORK (Sample)**  
**Collection Condition Survey**

[Park Name]

**I. Background Statement**

[Provide information on the size and breadth of collections and why a Collection Condition Survey is needed.]

The park requesting a Collection Condition Survey of collections is:

[name - address - telephone number]

**II. Purpose/Objectives**

A. The purpose of the work is to 1) conduct an on-site Collection Condition Survey (CCS) at [park]; and 2) produce a report identifying the conservation and preservation needs of individual objects stored and exhibited at the park. The results of the survey will provide guidance to the park and Regional curatorial staff in setting priorities for object stabilization and/or treatment, and preservation management of the park collections. The survey will also facilitate budgeting, scheduling, and subsequent communications with conservators regarding treatment. Object-specific data from the survey will be entered into ANCS+, the park's automated collections management system.

The focus of the survey is upon conservation treatment needs, i.e., on determining and recording the conditions of individual objects or groups of objects in the collection which are in need of some form of professional conservation treatment or treatment by technicians with the input of a conservator. Secondary information will include recommendations for preventive care, and improvements to storage and exhibit conditions.

B. The Surveyor must comply with the *Code of Ethics and Guidelines for Practice* of the American Institute for Conservation of Historic and Artistic Works (AIC) in all work performed.

C. A time will be set for the site visit in conjunction with the park Superintendent and the Surveyor when it is convenient for both.

D. Prior to the visit the park will provide:

- a copy of the Scope of Collection Statement (SOCS),
- any previous surveys or reports that may assist the conservator in understanding the history of park collections including:
  - Collection Management Plan
  - Collection Storage Plan
  - environmental monitoring records
  - fire protection or security surveys
  - Emergency Operation Plan (EOP)
  - Structural Fire Plan
- significance criteria, if available, for all objects to be evaluated by the conservator. This information will be entered into ANCS+ before the survey takes place.

The conservator may provide the park with a pre-visit survey that will be completed before the visit.

**Figure 3.2. Sample Scope of Work for Requesting a Collection Condition Survey**

- E. Except as may be additionally approved in advance by the Superintendent, the park staff will provide on-site:
- significance criteria, if available, for all objects to be evaluated by the conservator. This information will be entered into ANCS+ before the survey takes place.
  - a suitable work space
  - access to collection storage rooms, vaults, cabinets, shelves, and other locations of museum objects
  - opening and closing of storage cabinets and vault or other containers that may be locked
  - assistance with moving heavy or unwieldy objects
  - access to museum property accountability (catalog and accession) and conservation (treatment and survey) records when required
  - answers to questions about such matters as existing environmental monitoring and control, preventive care of objects, uses of objects, plans for future acquisition and disposition of objects, and the park's pest management program
  - other information as reasonably may be needed

### III. Tasks

- A. The conservator will conduct an entrance interview upon arrival at the park with the Superintendent with designated park staff (curatorial, maintenance and other cultural resources staff). The purpose of the interview is to explain to the staff the Surveyor's methodology and anticipated schedule for the survey and to detail any local support that may be expected.
- B. Conduct a hands-on survey of collections by examining each object individually, or, as appropriate, by examining representative samples of large groups of essentially identical objects. The following factors shall be considered in determining the condition of an object and conservation treatment needs:
- The nature of the environment in which collections are stored or exhibited including building construction, temperature, relative humidity, dust, natural and artificial light sources, pests, and other agents of deterioration.
  - Storage methods, mounts, and techniques including appropriateness, quality, and efficiency of use.
  - Evidence of recent damage or deterioration, including failure of preservation treatments, damage to objects during their use for interpretation and study, effects of visitor handling or vandalism, and deterioration due to adverse environmental factors.
  - Any other general or specific issues concerning the collection's preservation, conservation, and/or treatment needs.
- C. Upon completion of the survey, the conservator will meet with the park Superintendent and designated curatorial staff to go over the results of the survey. The close-out meeting should cover substantially the same subjects and recommendations the surveyor anticipates including in his/her report. At this time, the conservator will gather any data or information not already obtained that will be required for production of the survey report.
- D. The conservator will prepare a written report of the survey just completed. The report shall include the following elements:
- Brief description of the schedule, sequence, procedures, and methodology used in conducting the survey in the park; identification of person(s) conducting the survey; identification of park staff who were involved in the survey and how they were involved; a brief summary of the entrance and exit interviews.

**Figure 3.2. Sample Scope of Work for Requesting a Collection Condition Survey** (continued)

- Condition information on individual items or groups of items in an electronic format.

This information must be transferable to the Conservation Module in ANCS+. [Required and optional fields are described fully in the *ANCS+ User Manual*.] The contractor will provide these fields on disk using an Access template provided by the NPS or using the ANCS+ Conservation Module provided by the park. The park will transfer this information to the ANCS+ files.

E. When preventive maintenance treatment or simple treatments that can be carried out by park staff are identified, the treatment should be described briefly. When simple treatments are described, the materials to be used should also be recommended. All recommended materials should be those commonly used by conservators and selected for reversibility, stability, and ease of use. Materials should be described generically, though brand names also may be given for reference purposes.

F. Provide instructions for the park curatorial staff to follow when carrying out work that the Surveyor recommends they perform. In most instances, such instructions will have been previously prepared for another institution or will be copied from published works.

G. Provide estimate of time required for a professional conservator to carry out each recommended treatment. If possible, provide an estimate of what the treatment would cost if done by a conservator specializing in that work. The park can use this information to program funds to accomplish the work. When appropriate, note economies of cost or other benefits that might be realized by simultaneously treating similar objects, or objects with similar treatment needs.

#### **IV DELIVERABLES AND PAYMENT SCHEDULE**

A. Five copies of the draft survey report on 8 1/2" x 11" paper, single sided with each line numbered at the left side of the page shall be provided. A title page is required indicating the name of the park, the Surveyor's name, and completion date of the project. A table of contents may be necessary. Individual object information must also be provided in electronic format as described in the *ANCS+ User Manual*.

B. The Surveyor's report must be on 8 1/2" x 11" neutral pH, high alphacellulose, white paper such as Permalife Bond Paper from Howard Paper Mills or equivalent, single -sided, with page numbers in carbon-based, black laser printer ink. A title page is required indicating the name of the park, the Surveyor's name, and completion date of the project. A table of contents may be necessary. One hard copy and an electronic copy should be provided. The diskette should be labeled with the same title as the report plus the file name. Any revised individual object information must also be provided in electronic format as described in the *ANCS+ User Manual*.

C. Photographic documentation must be in black and white with both the negative and a 4" x 5" print supplied. All photographs must meet ANSI specifications (see information in Appendix R). Surveyor must sign a release form granting copyrights to all photographs to the park. (See *NPS Museum Handbook*, Part III, Figure 3.4, Assignment of Copyright by Contractor.) Surveyor may keep a copy of each image for private or educational use. Images kept by the contractor may not be used in for-profit publications, for commercial distribution, or for exhibitions by the surveyor or any other individual or institution without written permission from the Superintendent or Park Curator. The credit line shall include the following information: "Courtesy of the National Park Service," Park Name, Object Name, Object Date, Catalog Number.

D. A separate sheet of photographic captions will be prepared and the file will be on the diskette with the report. When applicable, the captions will link directly to an object's accession or catalog number. The number shall be written in carbon black ink or pencil on the non-emulsion side of the image on the border or non-image area in neat, easily readable print.

**Figure 3.2. Sample Scope of Work for Requesting a Collection Condition Survey** (continued)

E. Digital images shall be recorded for supplementary documentation of each object. A copy of each file, in uncompressed TIFF format, shall be provided to the park with sufficient information to allow transfer of the image into ANCS+. JPEG files or any form of lossy compression files will not be accepted.

F. Payment shall be made in two phases.

- Phase I involves the site visit and preparation of the DRAFT Collection Condition Survey. The first draft will be due 30 days following the site visit (or sooner if the Surveyor elects to do so). Upon receipt of the draft document and an invoice, 50% of the total sum will be delivered to the contractor. The park will provide government review comments within 30 days.
- Phase II includes delivery of the final document, which is due 30 days following receipt of the review comments. Phase II payment of the remaining 50% of the total sum will be delivered upon receipt and acceptance of the final documents and receipt of an invoice.

The final Collection Condition Survey shall be sent to:

**[name - address - telephone number]**

**Figure 3.2. Sample Scope of Work for Requesting a Collection Condition Survey** (continued)

**Project Description:**

The park has a collection of approximately 300 desiccated wood and fiber objects recovered from dry caves throughout the Southwest. These materials include basketry, sandals, textiles, cordage, and a number of small wooden artifacts. In 1998 a conservator carried out a Collection Condition Survey on this collection. Items were prioritized for treatment and a basic treatment methodology was recommended.

Needs include stabilization of loose fragments, basic cleaning, removal of deposits from burial and construction of specialized mounts. Conservation treatment will also identify fiber and wood types and construction methodology. These objects are primary sources for archeological research and conservation treatment is necessary so that the materials can safely be made available to researchers for study. Analysis carried out during treatment will add to the documentation available on these objects.

**Figure 3.3. Example Project Management Information System (PMIS) Statement for Requesting Conservation Treatment Based on CCS**