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Organizational Planning

Defining a Mission and Strategic Planning to Help Meet Preservation Goals

Chris Taylor
Maryann McConnell
Kara Wentworth
Organizational Planning
Defining a Mission and Strategic Planning to Help Meet Preservation Goals
Chris, Maryann, and Kara

Mission and Vision Statements

Mission Statements...
Describe the purpose of your organization
Are tools for making decisions about priorities, resources, and actions.
Describe what is “wrong” with the world and what role your organization will take in fixing it.

Vision Statements...
Describe the results of your organization’s work
Are tools for inspiring your organization’s member to produce quality results
Describe the world after you have succeeded in changing it.

What do they affect?
- Strategic plan
- Short- and long-term goals
- Collaborative relationships with other organizations
- Fundraising
Mission and Vision Statements

What do they affect?

- Collection management policies
- Volunteer recruitment
- Public engagement and outreach
- Allocation of staff/volunteer time and financial resources

Mission and Vision Statements

Things to keep in mind as you write:

- These should reflect your organization’s values, goals, and priorities.
- They are only useful if they are clear, actionable, and easy to remember.
- Neither statement is set in stone... but each should provide long-term continuity.
- Ultimately, both your mission and vision statements are tools to help inform decisions and inspire action, and to help your organization become the best version of itself.

Analyzing Resources for Planning and Vision
A tool for examining an organization’s internal and external resources:

**Strengths**
- What are your museum’s strongest contributions to your community?
- What does your museum do that no one else does?
- What do your users like best about your museum?

**Weaknesses**
- In what areas does your museum have fewer resources than you need?
- What else needs improvement?
- What do your users wish you did better?
SWOT Analysis

Opportunities
• What could you do if only your museum had the resources to do it?
• What is happening in the world now that you would like to take advantage of?
• How can your strengths open doors to opportunities for your museum?

Threats
• What is happening in the world that could impact your museum negatively?
• What museum services are provided elsewhere with greater ease for users?
• What weaknesses leave you vulnerable to cuts in or competition for your services

Strategic Planning
Strategic Plan

- 3-5 year map or chart that an organization creates and follows in order to reach their goals
- Helps direct efforts and resources in an efficient and strategic manner
- Can be a formal document used to direct and evaluate progress

Strategic Planning

- Establishing goals that make the organization:
  - Dynamic in the community
  - Focus on priorities
  - Build commitment and engage stakeholders
- Can be useful for the organization overall
- Can be applied to specific projects

Strategic Planning - Steps

① Identify your Mission Statement
Strategic Planning - Steps

① Identify Stakeholders and Their Roles:
- Board Members
- Staff
- Volunteers
- Donors
- Patrons

③ Develop a List of Projects and Goals

Railroad Museum of Pennsylvania - Strategic Focus Area #5: Collections
Goal: Improve Collections Care, improve access to collections and continue planned acquisitions
Strategy: Implement specific items in Museum’s long-range conservation plan
Action Steps:
1. Preservation – Locomotive and Railcar Collection: restore as many as possible and get as many under roof (roundhouse) as possible
2. Design and construct new museum-quality storage facility for small 3D items and Library and Archives Material
3. Design and install new exhibits using $5 capital monies once released
Strategic Planning - Steps

④ Develop a Timeline for Completing the Goals

Strategic Planning - Examples

Historical Museum at Fort Missoula

Handout Information

- Mission Statement Tips and Worksheet
- SWOT Analysis Worksheet
- Planning Brainstorming Worksheet
- DIY Strategic Planning for Small Museums
Action Steps

- **First Step**
  Create a Mission Statement

- **Next Step**
  Conduct an Analysis of Your Museum’s Strengths and Weaknesses

- **Advanced Step**
  Create a Strategic Plan for Your Museum
Action Steps

First Step
☐ Create a Mission Statement

Next Step
☐ Conduct an Analysis of Your Museum’s Resources

Advanced Step
☐ Create a Strategic Plan for Your Museum
CREATING MISSION & VISION STATEMENTS

MISSION STATEMENT (WHY YOU EXIST)
A one-sentence statement describing the reason an organization or program exists
This should be a practical, tangible tool you can use to make decisions about priorities, actions, and responsibilities?

NEEDS TO...
☐ ...be clear and simple (most aren’t)
☐ ...avoid elaborate language & buzz words
☐ ...easily explained by others
☐ ...not be confused with a vision statement
☐ ...be recognizably yours

1–5 WORD ANSWERS
What type of entity/program? Is this important? (e.g. a nonprofit, volunteer program, event, business, etc)
Why do you exist? (problem/needs) (e.g. Millions lack access to safe water)
What’s the broadest way to describe the work? (e.g. Providing clean drinking water)
For whom do you do this work? (e.g. To people without access)
Where do you work? (geographic boundaries) (e.g. in developing countries)

EXAMPLE MISSION STATEMENTS
charity: water is a non-profit organization bringing clean, safe drinking water to people in developing nations.
HandsOn Network inspires, equips and mobilizes people to take action that changes the world.

VISION STATEMENT (DESIRED END STATE)
A one-sentence statement describing the clear and inspirational long-term change, resulting from your work.
These should be practical, tangible tools you can use to lead your group or organization in achieving quality results

NEEDS TO...
☐ ...be clear and simple (most aren’t)
☐ ...avoid elaborate language & buzz words
☐ ...easily explained by those involved
☐ ...not be confused with a mission statement

QUESTIONS TO CONSIDER
What needs to be changed?
What are the major issues or problems?
Why should issues be addressed?
What are their costs to the involved parties?
What are the strengths and assets?
Both of org/program and those being served
What is your dream end-state?
In a perfect world, what would this look like?
What would success look like?
Specifically for this particular project/organization

EXAMPLE VISION STATEMENTS
No child in our city will go hungry to bed in the evening.
HandsOn Network’s vision is that one day every person will discover his/her power to make a difference.

VIEW A LARGE LIST OF EXAMPLE VISION STATEMENTS
http://topnonprofits.com/vision-statements/

CREATING A VOLUNTEER MANAGEMENT PROGRAM
A COLLABORATION BETWEEN

TOP NONPROFITS
POINTS OF LIGHT
HandsOn Network

If you share this resource please link to http://topnonprofits.com/vision-mission

@vankorlaar   @HandsOnNetwork   @PointsOfLight
Things Affected by Your Mission

• Strategic plan
• Short- and long-term goals
• Collaborative relationships with other organizations
• Fundraising
• Collection management policies
• Volunteer recruitment
• Public engagement and outreach
• Allocation of staff/volunteer time and financial resources
Examples: Mission Statements

Smithsonian: The increase and diffusion of knowledge. (6 words)

NPR: To work in partnership with member stations to create a more informed public – one challenged and invigorated by a deeper understanding and appreciation of events, ideas and cultures. (28 words)

The Nature Conservancy: To conserve the lands and waters on which all life depends. (11 words)

Oxfam: To create lasting solutions to poverty, hunger, and social injustice. (10 words)

New York Public Library: To inspire lifelong learning, advance knowledge, and strengthen our communities. (10 words)

Creative Commons develops, supports, and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation. (15 words)

AARP: To enhance quality of life for all as we age. We lead positive social change and deliver value to members through information, advocacy and service. (25 words)

Amnesty International: To undertake research and action focused on preventing and ending grave abuses of these rights. (15 words)

*These and other examples can be found at https://topnonprofits.com/examples/nonprofit-mission-statements/ and https://topnonprofits.com/examples/vision-statements/.
Examples: Vision Statements

**Smithsonian**: Shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world (17 words)

**NPR**, with its network of independent member stations, is America’s pre-eminent news institution (12 words)

**The Nature Conservancy**: Our vision is to leave a sustainable world for future generations. (11 words)

**Oxfam**: A just world without poverty (5 words)

**Creative Commons**: Our vision is nothing less than realizing the full potential of the Internet — universal access to research and education, full participation in culture — to drive a new era of development, growth, and productivity. (33 words)

**Teach for America**: One day, all children in this nation will have the opportunity to attain an excellent education. (16 words)

**Amnesty International**: Amnesty International’s vision is of a world in which every person enjoys all of the human rights enshrined in the Universal Declaration of Human Rights and other international human rights instruments. (31 words)

*These and other examples can be found at [https://topnonprofits.com/examples/nonprofit-mission-statements/](https://topnonprofits.com/examples/nonprofit-mission-statements/) and [https://topnonprofits.com/examples/vision-statements/](https://topnonprofits.com/examples/vision-statements/).
Mission Statement Worksheet

Remember, a good mission statement addresses your organization’s VALUES, PURPOSE, and ACTION.

Answer the following questions on the lines provided:

1. Who are we?

2. What basic needs do we need to meet?

3. How do we respond to those needs?

4. How should we respond to our key people (including patrons, volunteers, stakeholders, etc.)?

5. What makes our organization unique?

Now, try to synthesize those answers into a single 12-18 word statement. Shorter is better.
## Do’s and Don’ts

<table>
<thead>
<tr>
<th>Good statements:</th>
<th>Bad statements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are concise</td>
<td>Are long-winded</td>
</tr>
<tr>
<td>Are single, strong sentences</td>
<td>Are long, rambling paragraphs</td>
</tr>
<tr>
<td>Are specific</td>
<td>Are vague</td>
</tr>
<tr>
<td>Stir people’s emotions</td>
<td>Are overly logical or distant</td>
</tr>
<tr>
<td>Emphasize “why”</td>
<td>Focus on “what” and “how”</td>
</tr>
<tr>
<td>Use everyday language</td>
<td>Use jargon</td>
</tr>
<tr>
<td>Sound good out loud</td>
<td>Are hard to say</td>
</tr>
<tr>
<td>Are easy to remember</td>
<td>Are forgettable</td>
</tr>
<tr>
<td>Are exciting</td>
<td>Are boring</td>
</tr>
<tr>
<td>Can be acted upon</td>
<td>Are unclear</td>
</tr>
</tbody>
</table>

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Strategic Planning Warm Up

What is your vision for the museum?

List five projects you would like to see happen at the museum to work towards this goal:

1. _____________________________________________
2. _____________________________________________
3. _____________________________________________
4. _____________________________________________
5. _____________________________________________

Where do you see yourself in this vision?

Where do you see the museum in five years?
## SWOT Analysis for Your Museum

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are your museum’s strongest contributions to your community?</td>
<td>In what areas does your museum’s have fewer resources than you need?</td>
</tr>
<tr>
<td>What does your museum do that no one else does?</td>
<td>What else needs improvement?</td>
</tr>
<tr>
<td>What do your users like best about your museum?</td>
<td>What do your users wish you did better?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>What could you do if only your museum had the resources to do it?</td>
<td>What is happening in the world that could impact your museum negatively?</td>
</tr>
<tr>
<td>What is happening in the world now that you would like to take advantage of?</td>
<td>What museum services are provided elsewhere with greater ease for users?</td>
</tr>
<tr>
<td>How can your strengths open doors to opportunities for your museum?</td>
<td>What weaknesses leave you vulnerable to cuts in or competition for your services?</td>
</tr>
</tbody>
</table>
In the spirit of “do-it-yourself” television shows, this technical leaflet offers a do it yourself (DIY) approach to strategic planning. Developed in 2003 at the General Lew Wallace Study & Museum, a small museum and historic site, in Crawfordsville, Indiana, this approach is especially appealing to small museums as it costs little to no money to implement and it can be completed in-house. This approach is also a good match for small museums as it accommodates “nuts and bolts” goals and projects.

For the purposes of this article, a small museum will be defined as having an annual budget of less than $250,000, operated with a small staff with multiple responsibilities, and employing volunteers to perform key staff functions. Other characteristics such as the physical size of the museum, collections size and scope, etc. may further classify a museum as small.

Many small museums operate with volunteer and non-professional staff. Some small museums are in caretaker mode—operating to keep the roof on and the doors open. They may not have had the opportunity to look to the future and make the best decisions for the organization in the long term. DIY strategic planning is an excellent way to start thinking about the future and improve the present.
At its core, this template is rooted in basic project management where it is important to determine tasks, resources, and deadlines ahead of a project's start date to lower the risk of failure. With a vision for your organization, an allocation of time for planning, public speaking ability, and a modicum of computer literacy, you can easily create a strategic plan embraced internally by staff and externally by donors, grantmakers, civic leaders, visitors, educators, and other interested parties.

**Why Are Strategic Plans Needed?**

A strategic plan is a map or chart that an organization agrees to follow for three or five years in order to reach their goals. Institutions need strategic plans to help direct efforts and resources in an efficient and strategic manner. Responding to community and audience needs requires a strategic plan.

The planning process is strategic because you are establishing the goals that make the organization dynamic in its community and allow it to keep in step with community needs. It is systematic because it is focused and evaluative in choosing priorities. Institutions make decisions about short- and long-term goals and secure consensus. And most importantly, strategic planning is about building commitment and engaging stakeholders. Once the plan is in place and you have met with all the stakeholders you can, you now have the authority to complete the work and a course of direction to take.

Strategic plans are different from long-range or operational plans. Plans are strategic when the goals are responding to the museum's environment, seeking a competitive edge, and looking for the keys to long-term sustainability. Long range or operational plans do not redefine the organization and position it in the community. These plans are more concerned with laying out immediate and future goals and are less concerned with organizational change. At the end of a five-year strategic plan, you will want to take the time to evaluate the success of the plan and consider next steps. If it was a complete success, changing course may not be necessary and you simply need to plan the next five years along the same course. This would warrant a long-range or operational plan.

Through strategic planning, pen is put to paper and major goals are defined. These goals may spur a sea change or a small shift in operations. It is important to realize at the beginning that the strategic plan is the means to an end. It is a living document and as such, opportunities that are good for the organization should be considered with the plan in mind, but not completely disregarded because “it’s not in the plan.” The means are flexible, while the end is not. The Strategic Plan is the means (flexible) to an end (not flexible). It is a LIVING DOCUMENT.

**Is Your Museum Ready for Strategic Planning?**

Conditions must be right for strategic planning to begin. None of us has the time to waste on planning if the board does not support it or if the goals are unachievable. In these circumstances, staff and board will ignore any attempt at a plan. The proper strategic planning conditions depend on the organization, but the primary indicators for readiness include board and staff commitment and a vision for the future.

There are two parts to guaranteeing the success of a strategic plan:

1. Creating a realistic strategy that matches current and anticipated resources.
2. Ensuring board and staff embrace the plan and agree on the articulated goals.

Before you get started, the director should evaluate organizational readiness. If the organization has serious issues—such as board in-fighting, major budgetary shortfalls, or cynicism regarding planning—take steps to resolve them before the process begins. The following table provides several statements to help you consider organizational readiness. Consider the statements provided in the left column of the table and check whether your museum is ready or not. When selecting a “No” response, make a note about whom to consult with to consider resolution (the board president, executive committee, etc.) If you realize you are not ready based on two or more negative responses, use the considerations in the far right column to determine how to get ready and when you might be able to begin strategic planning.

If you have any checks in the “No” column, consider addressing those questions before beginning strategic planning and determining when to start. If you cannot easily remedy these considerations, create an action plan based on responses. Work with key individuals to execute that plan and set a schedule for getting back to strategic planning.

If you are ready, consider if you have lingering comments or concerns to capture and share with the appropriate committee or person before you proceed. It’s essential to address these concerns up front.

**The Key Players**

There are several individuals who should participate in the strategic planning process, but the actual number of participants and their function in the organization will vary from museum to museum. The goal should be to have all board members participate in the process, and depending on staff size, all or most of the staff should participate. It is also important to look beyond the internal players and think externally. The museum exists to serve the public, so what does the public want from your institution?

Depending on your museum’s size, you could have the board, staff, and community leaders all sitting at...
<table>
<thead>
<tr>
<th>Readiness Issues</th>
<th>YES</th>
<th>NO</th>
<th>Considerations if not ready</th>
<th>Start strategic planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>The museum has enough money to pay bills over the</td>
<td></td>
<td></td>
<td>How can your museum get enough money? By when?</td>
<td></td>
</tr>
<tr>
<td>next six months.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The museum has a history of being able to plan and</td>
<td></td>
<td></td>
<td>What can be done to address this issue? Leadership development? Other ideas?</td>
<td></td>
</tr>
<tr>
<td>implement its plans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board members work well together. Staff members get</td>
<td></td>
<td></td>
<td>Problem in board? Problem with staff? What can be done?</td>
<td></td>
</tr>
<tr>
<td>along.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board members are willing to be involved in top-level</td>
<td></td>
<td></td>
<td>What can be done?</td>
<td></td>
</tr>
<tr>
<td>planning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board members and staff will find the time to do the</td>
<td></td>
<td></td>
<td>What can be done to free up more time?</td>
<td></td>
</tr>
<tr>
<td>planning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No major changes are expected in the next 1-2</td>
<td></td>
<td></td>
<td>What changes? What can be done to get ready for strategic planning? By when?</td>
<td></td>
</tr>
<tr>
<td>months.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is extensive support for planning in your</td>
<td></td>
<td></td>
<td>What can you do to address any cynicism?</td>
<td></td>
</tr>
<tr>
<td>museum (internally and externally).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic planning efforts are underway because the</td>
<td></td>
<td></td>
<td>What should you do about this?</td>
<td></td>
</tr>
<tr>
<td>museum is ready for change and not just because a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grantmaker or funder is asking for it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

Adapted from Field Guide to Nonprofit Strategic Planning and Fundraising published by Authenticity Consulting, LLC.

the same table during the strategic planning process. But realistically, splitting these groups up might be better. You could hold a joint board and staff session and a separate public focus group or you could hold three separate sessions. It depends on what the facilitator and/or the museum director find to be the best scenario for the organization.

Creating the Plan

The following is a step-by-step outline for Do-It-Yourself Strategic Planning developed at the General Lew Wallace Study & Museum. This approach has been successfully implemented in other small organizations and produced the same results. While it was a complete success for us, you may want to adapt some steps to match your organizational behavior. For example, at my museum, board members involved in the plan were unable to meet for a long period of time. For this reason, we compromised and shortened the first session to three hours (instead of the six we really needed). By the next strategic planning cycle, the board will be more accustomed to strategic thinking and implementing plans and we anticipate that we will spend more time around the table developing the next plan.

DIY Strategic Planning has three key processes:

1. Preparation
2. Facilitation
3. Formatting

I. Preparation

1. Gain board support for strategic planning. One of the key functions of the board is to set the strategic direction of the museum and ensure that the resources are in place to realize the goals. During the course of a regular board meeting, the president should lead a discussion about strategic planning, the methods you plan to use, board member expectations, and how much time the process will take. Once the groundwork is in place, the president should call for a motion to proceed with strategic planning. During that meeting, set the date for the first session.

2. Select project leader/facilitator. The museum director serves as the project leader/facilitator in the absence of funding for a consultant. While it is better to have an independent party facilitate brainstorming activities and guide the overall process (this allows the director to participate more fully and prevents the director from being “heavy-handed”), this is often not feasible in a small museum. To make sure the director has input in the process, he or she may meet with board members before the meeting, share ideas, and encourage them to spur these ideas during later brainstorming opportunities.

3. Determine length of plan. Decide along with the board whether this will be a three- or five-year plan. There is no magic formula for deciding the length of the plan. In the case of our institution, we chose five years because the board and director knew that resources would support a five-year plan and we knew that the amount of change needed to improve operations would be better affected by a five-year plan. However, we left the fifth year open and assigned no formal tasks, specifically for the purpose of leaving room for scope and timeline changes. During the strategic planning process, the staff consisted of only two part-time seasonal employees, the director included. As the implementation of the plan gained momentum, the board and staff worked together to negotiate
deadlines and adjust the scope to fit resources. By year three of the plan, the fifth year was full of tasks.

If you are an all-volunteer organization, a three-year plan might be more suitable. Volunteer energy needs to be replenished more frequently and the planning process can be a tool for reenergizing and refocusing. An organization that has board members not completely convinced with strategic planning may choose three years to demonstrate organizational potential. Experts do not recommend plans shorter than three years because it takes at least three years for many changes to take root and for resources to align with strategic areas.

4. Identify five organizational categories. Identifying categories from the outset will help frame the overall planning process and the later brainstorming activity. You will need to distill museum functions and projects into five categories at most. (Education, Administration, Collections, etc.) These categories can be broad umbrella terms or they can be issues pertinent to your organization such as interpretation, a community initiative, or a major event (e.g., a centennial commemoration). To guarantee the development of a feasible plan, limit it to five categories and use them as guideposts during the planning process and as the backbone of the final plan.

At General Lew Wallace Study & Museum, we used the categories of Education, Administration, Collections Management, Building/Grounds Preservation, and Development. For our purposes, exhibits, educational programming, and guided tours fell under the Education umbrella because their ultimate intent is to educate the public. Development included fundraising, public relations, marketing, and staff training because these efforts develop the overall sustainability and visibility of the site. For us, these categories were most relevant in 2003, but in 2008, when we develop the next plan, they may not be.

5. Distribute a “warm-up” activity. Before the first scheduled strategic planning session, distribute a worksheet to participants to spur thinking about the future of the organization and prepare them for the brainstorming session. Email or mail the worksheet and instruct them to complete it and bring it to the first session.

II. Facilitation

1. Convene a brainstorming session. Ideally, the first gathering should be a five-hour session with a clear agenda provided ahead of time. During this first gathering, the lion's share of board work is completed. Board members will be sharing ideas, thinking of new ones, and begin placing them into concise statements.

For this first session, you will need two flip charts (preferably the kind with adhesive) and several colors of markers. Do not use a chalkboard or dry erase board. You need to keep the notes throughout the entire planning process—you will refer to them during the second strategic planning session and you will need them as you draft the plan. Plus, it is always a good idea to keep the evidence.

2. Begin with an icebreaker exercise. Although it may sound and feel corny, an icebreaker exercise is a good way to make everyone comfortable and ready to begin. If you choose the right icebreaker, you can learn something about the participants. Go around the room and ask what was the last museum they visited (it cannot be yours) and why. You'll learn something about what drives them to go to a museum, what kinds of museums they like, or how far they will travel to visit a museum. Or, you'll find out that some of them have no relationship to museums other than the one they serve. Both types of responses can be very enlightening.

3. Present ground rules. Adults need ground rules as much as children do. To keep the group charged with positive energy and encouragement, cover the ground rules and post them on a wall in the meeting room. Refer to the rules throughout the process to help control behavior issues. At no point do you want anyone to feel alienated, threatened, or discouraged. The brainstorming process works best when everyone is firing off ideas and working in a respectful manner.

4. Work in pairs. Before you start the open brainstorming segment, divide the group into pairs. Be sure to select pairs of people who may not know each other very well or individuals who rarely have the opportunity to work together. Send them to various locations (outside, down the hall, in the corner) with the “Before the Storm Worksheet.” This worksheet is designed to build confidence among participants,
drill down the ideas, and begin the visioning process. At the end of the exercise, the pair will condense their ideas into five strategic goals.

5. Brainstorm as a group. The purpose of the group brainstorm is to gather as many ideas as possible, capture them on paper, and keep everyone engaged and excited about the ideas. Very simply, facilitation is about helping a group of people reach their goals. During the course of the brainstorming session, the facilitator will:

- Control the meeting
- Set rules and enforce them
- Ensure participation
- Allow for flow of thought
- Keep the ball rolling
- Keep the meeting on topic
- Act generally as a non-participant
- Be a subject matter expert
- Accurately sum up discussion
- Smile as much as humanly possible

Brainstorming sessions are fast, exciting, and creative. To warm up the group to the challenge, you may start the session with a mock brainstorm. Ask them to share ideas about what are the great moments in American history or what are the best movies of all time. Not only will newcomers to the process get the opportunity to see how it works (and you will get a chance to practice), you will see who the talkers and who the wallflowers are. This also helps you keep the conversation balanced and watch for domineering personality types.

Once the ball is rolling, these steps will take you through the process and help you gather the most salient points:

- The facilitator will jot ideas onto flip charts while keeping ideas flowing.
- Once momentum has slowed, review ideas for clarity and ask for a show of hands of how many people identified these ideas on worksheets ahead of time (mark the number of hands next to each one to show consensus—items with the most hash marks should receive highest priority in the plan). This quick break will likely inspire more brainstorming. Keep it going while ideas are hot!
- During a food break, categorize the brainstorm list onto separate flip chart sheets. Before getting started, write each operational category on a separate flip chart sheet (e.g., Collection Management). As an alternative, you can run through the lists and code the idea into a category, i.e., D for Development, E for Education, etc.
- Once everyone has eaten and had a break, reconvene the group to consider the categories and how you assigned them. Look for gaps. Did they have a million programming ideas but never mentioned collections care? You can take time at this point to restart the brainstorm if there are some obvious holes.

6. Initial visioning session. Once the brainstorm period has slowed down, it is time to start developing a vision statement. A vision statement is focused on the future and considers what the museum will look like down the road (What will the visitor experience be like? How will the museum function?)? The vision statement incorporates the needs and desires of the board and staff and crystallizes them into a picture of the future. For some, it is the simple question, “What do you want to be when you grow up?” This first visioning session will start with a conversation resulting in a first draft of a vision statement. To start the discussion, it is useful to create a word list on flip charts about what the board values and what the museum can offer. Having a pool of words to refer to is helpful when drafting a statement.

7. Plan a follow-up session. Before the participants leave the first session, establish the date and time of the follow-up session. Get a sense of how many people will attend the second session. (For some reason, no matter what you do, expect fewer participants for this second session.) It will last about two hours.

During the follow-up, the facilitator presents the plan’s initial draft and walks the group through the format. This will include ideas from the first brainstorm session and formalized strategic goals. It may also include proposed timelines and anticipated resources. This is another opportunity for idea clarification and consideration of the priorities and timeline.
Once the group approves the first report, return to the vision statement drafted in the first session. Does it still hold water? Does anyone have revisions? If they do, take time to wordsmith, but do not allow the conversation to drag out longer than thirty minutes. You will want spend the bulk of your time in the session on developing the mission statement.

The mission statement is the most important series of words the board will consider, develop, and approve. It defines the purpose of the organization. It answers why you are here and why the museum matters to its visitors and community. The board must believe in the mission and enforce it. While the vision looks to the future, the mission establishes why the museum should continue and the strategic plan determines how it will reach the future. Your current mission statement might be aligned with your plan’s direction, but the board needs to review and consider it during this process. If you decide to write a new one, it may be helpful to refer to the same list of words that the group used to develop the vision statement. Another excellent source of inspiration is to evaluate what visitors and program participants regularly say about the museum. What inspiration do they feel? What questions do they frequently ask?

As in the first session, the group should leave the table with a draft mission statement in their notes. At the next regularly scheduled board meeting, present the final draft of the plan for approval and ask them to formally adopt the new mission statement.

Overall, the strategic planning process can take between four and twelve months. We began planning in May and approved the final plan in September. For us, this short timeframe was essential because we had a great deal of “nuts and bolts” work to do immediately and the director wanted as much authority as possible to accomplish the work. The strategic plan allowed that to happen.

III. Formatting

The final document is simply a formal plan that speaks about the organization’s value and makes a case for its future. It outlines the organizational goals and spells out the steps to realize those goals. Once formalized, this document should be shared with community stakeholders, donors, political leaders, volunteers, and whoever is interested in the plan. Post it on your website. Create an abbreviated version and turn it into a brochure. Make presentations in your community sharing the exciting news that your plan has produced.

The format of your plan will look like this:

1. **Introduction** – Provide information regarding how the plan was developed, who participated, and what the timeframe was.

2. **History of the Organization** – Start from the beginning. How did your museum develop? What are some of its milestones? The strategic plan is used as a way to build awareness of your organization and attract support for what you do. Present the whole picture.

3. **Vision Statement and Mission Statement**

4. **Strategic Goals** – After the first brainstorming session, the director will synthesize the ideas and themes into broadly stated strategic goals. All of the activities and projects the group decides to implement will have a relationship with these larger goals. This section requires the director to have some personal vision for the organization.

5. **Evaluation** – A plan works best when the board and staff refer to it and regularly evaluate its progress. Explain how you will track and measure the impact (see Tracking and Measuring the Plan).

6. **Implementation Schedule** – Staff develop, and the board approves as part of the entire plan, the last three sections. You may want to involve key board members in the process of assigning tasks, solutions, responsibilities, and deadlines. In this section, indicate the priority of the project. You will likely have some projects that are urgent and/or have the requisite resources to accomplish them. Assign these projects highest priority. Other tasks may be excellent ideas but funding sources are not clear at the moment and postponing the idea will not affect operations or endanger anything. This type of project will have a lower priority rating. Pick realistic timeframes—estimate on the high side—and whenever possible, assign responsibility to a person, not a committee.

7. **Task Lists** – To understand better what the institution will accomplish year-to-year, reorganize the implementation schedule into a listing of projects and activities by year and quarter. In this format, board and staff can track progress more clearly.

8. **Action Plans** – Used for major project and budget planning, action plans drill down details even further and are helpful tools for the board to review. A good action plan identifies the strategic goal addressed, solutions, action steps, deadlines, responsible parties, costs, and outcome measurements. In the final draft of the strategic plan, only include a template of an action plan. Create a new action plan each time you launch a project.

If you are still not sure how the plan should look, please email me at clegutko@ben-hur.com. I am happy to email you a copy of our first strategic plan.

**When the Plan is Ready**

**Tracking and Measuring the Plan**

Once the plan is in place and formally approved, track and measure its progress on a regular basis. Keeping tabs on the plan is a major concern of the board and staff and a formal reporting mechanism is useful. We use the task list and insert status updates on an annual or biennial basis. The board formally
approves the revised task list.

On a semi-monthly basis, the director’s report to the board is formatted to include each strategic goal and every item reported is placed underneath one of the goals. The staff also reviews the plan two to three times per year and makes adjustments to the regular work plan if needed. At year-end, we modify tasks not completed with a new deadline and justification for the change. This flexibility is essential because of our small staff size and funding limitations.

From the start of the plan in September 2003 to April 2006, we met sixty-eight percent of our goals. With the completion of a major capital project in 2006, we reached eighty-one percent of our goals with over a year left in the five-year plan.

**General Lew Wallace Study & Museum Strategic Plan Achievements:**
- We adopted a new name and developed an identity for the museum.
- The board of trustees restructured and grew from five members to thirteen.
- Fundraising efforts resulted in a 187% increase in income for the first twelve months. Each following year has netted similar results.
- Staff size increased from two part-time seasonal to two full-time and two part-time employees.
- We completed the Carriage House Interpretive Center, a full-service office and exhibit complex located in Wallace’s 1875 carriage house. This major capital project utilized nearly $250,000 in donations and grants.
- The museum introduced and sustained new and innovative annual programs, including the Lew Wallace Youth Academy, the Artists-in-Residence program, and the Winter Historic Preservation Workshop Series.
- Each year, we offer special programming inspired by the annual exhibit theme.
- Museum visitation has increased ten percent or more each year since 2003.

**Beyond the First Plan**
DIY Strategic Planning is best used as the first strategic plan for a small museum. If you have implemented the first plan’s goals and strengthened organizational capacity, the board and staff have greater options available when developing a second plan. For example, you may choose to use an outside consultant to facilitate and draft a new strategic plan. (Unbiased facilitation is always recommended.) Most importantly, with a fully implemented initial plan, chances are you can afford to pay for help when it is time for the second plan!

**Variations in the Process**
This approach is tailored for the smallest of museum staff and boards. At General Lew Wallace Study & Museum, we were a mighty bunch of two staff members and five board members using the approach. This model will work for larger board and staff sizes, but if the group becomes larger than eighteen to twenty people, I suggest you break up the group.

You could brainstorm and do vision/mission with the board (with a few staff members participating) and then separately with staff. Follow this with a session with the board where you bring the perspectives of both camps together and look for differences and similarities. This approach is especially helpful when looking for disconnects in the organization.

Another variation is to use community focus groups to gauge interest and perspective on the organization. With a smaller staff and board, include community members in the entire planning process and have everyone working through it together. Or, if there are too many individuals involved, hold independent strategic planning sessions and limit it to a brainstorming session. During the last thirty minutes, field test the new vision and mission statements and see if they resonate with the public.

**Managing Change**
If this is the first strategic plan for your organization, you are facing a great deal of change over the next few years. Being sensitive to stakeholders and processes is half the battle when managing change. Once you decide to make a change, think through the impact of the change and do some troubleshooting.

With a little thoughtful examination at the outset, the important changes you are making will last.

To orchestrate major changes at General Lew Wallace Study & Museum, we use charters and change documents. These tools open up communication channels and document the change. When appropriate, the board will formally approve the document, endorsing the change. Everyone starts out—literally and figuratively—on the same page.

- **Charters** – Charters are documents that outline responsibilities and structures, and they are tools for managing people, projects, and change. We use them primarily to define the purpose and goals of board and ad-hoc committees. With a charter, we make committee members aware of why they are there, chart out planned changes, promote accountability, and define budgetary impact. A charter typically has eleven components outlined and defined: project/committee overview, scope, objectives, relevant strategic goals, measures/deliverables, budget, customers, boundaries, milestones, deadlines, and supporting documentation.
- **Change Documents** – Informally referred to as a change document, these reports can be used to makes a case for change to the board, stakeholders, and government entities. The format we use defines the statement of need, the current state, and
the future state. It also offers a proposal, timeline, cost benefit analysis, barriers, and a final recommendation.

Both documents demonstrate you have done your homework and considered the impact of proposed changes. Essentially, if you cannot define what is requested in a charter or change document, you need to reconsider making the change.

Conclusion

This is just one approach to strategic planning. Other museum and non-profit professionals may stress varying approaches that may include SWOT analyses, more extensive visioning sessions, longer timeframes, etc. As a small museum director, I found that I really didn’t need to be that reflective the first time. And, with just two staff members working part-time, we were always on the front line testing what visitors wanted and making quick decisions to meet needs. In addition, in the fast-paced small museum environment, we needed this first plan in place quickly so we could make major board-mandated changes to improve operations.

In developing a strategic plan, it is really time for “first things first.” What will it take to do X? What will it take to do Y? Where do we start? Invariably it always ends up with fundraising and development. If you don’t have income, much less a sustainable income, how can you do innovative programming and exhibits or improve collections care? If you are struggling with timeframes and which tasks take priority, maybe it would be best to prioritize the development goals first. With the completion of a strategic plan, you have a strong case for support. Use it.

About the General Lew Wallace Study & Museum, Crawfordsville, IN

The General Lew Wallace Study & Museum is a National Historic Landmark site owned and operated by the City of Crawfordsville and governed by the Lew Wallace Study Preservation Society. The centerpiece of the site is the freestanding study that General Lew Wallace designed. Best known as the author of *Ben-Hur*, Wallace was a renaissance man and notable Hoosier. The museum houses personal mementos from his service as a Civil War Major General, second officer of the Lincoln Conspiracy military tribunal, Governor of New Mexico Territory, and as U.S. Minister to Turkey. Wallace’s artwork, violins, inventions, and library are on display, along with memorabilia from various adaptations of *Ben-Hur*.

Upon Wallace’s death in 1905, the Wallace family opened the study as a museum and operated it until 1939. The City of Crawfordsville has owned the property since 1941. Today, annual visitation is over 5,000 with an annual budget of $120,000. A full time director and associate director, two part time employees, and a small corps of volunteers staff the museum. Programs are offered year round including the popular Lew Wallace Youth Academy, the fall Artists-in-Residence program, and a variety of themed programming in support of temporary exhibits. The museum also hosts the annual Taste of Montgomery County, a fundraiser for the Preservation Society.

Resources

Alliance for Nonprofit Management, www.allianceonline.org


*How To Do Traditional Brainstorming*, www.brainstorming.co.uk/tutorials/howtobreanstorm.html


Cinnamon Catlin-Legutko has worked in small museums for over ten years and is currently the director of the General Lew Wallace Study & Museum. Since 2004, Cinnamon has served as chair of the AASLH Small Museums Committee and on the board of AAM’s Small Museum Administrator’s Committee. For more information contact her at clegutko@ben-hur.com.
Collections Development
Collections Development
Bethany, Erica, and Anne

Overview

- Acquisition
- Organization
- Inventory
- Deaccession

Remember to keep your mission statement in mind during these steps!
Consider creating formal policies concerning these processes.

Acquisition

Donor Release Form
- What to include:
  o Donor and Institution Name
  o A statement that transfers legal ownership from the donor to the institution
  o A description of the object donated
  o Date and Signature of donor and someone from the institution
Accession Numbers
- Unique identifiers assigned to an object
- Identifies an item as part of your collection and links item to any other documentation

Active vs. Passive
- Create a list of items your organization wants to obtain
- Include things you are not looking to accept

Organization
Create an organization method for storing materials
- Locating items efficiently
  - Provides better access to materials for your users
- Knowing what you currently have
  - Assess any gaps and/or excesses in your collection
  - Prevent unnecessary acquisitions
  - Making new connections = new display ideas
- Preservation Needs

Labeling Storage Areas
Best labeling practices (storage/preservation)
- Using #2 pencils w/ paper objects that aren’t boxed
- String and acid-free paper with 3D objects
Inventory of current materials
• Include (at the minimum)
  o Accession Number
  o Name of Item
  o Item Location

Inventory of current materials
• Consider including
  o Acquisition Date
  o Object Type
  o Object Description
  o Donor
  o Mediums of documentation

Deaccession

NOT synonymous with “throwing things away”
• Unless physically unsavable or lacking informational value

Alternatives
• Returning to donor
• Exchange
• Sell
• Disposal (esp for hazardous/highly degraded items)

Not a single-person decision
Action Steps

First Steps

☑ Inventory: Create a place to begin your inventory (it can be in an excel document or a notebook).

☐ Organization: Look at what you have, get a general idea of how you want your collection to be stored.

☐ Acquisition/Deaccession: Consider your mission statement and begin to evaluate what you want your collection to look like. Create a tentative acquisition/deaccession form/policy and deed of gift form.

Next Steps

☐ Inventory: Flesh out your inventory.

☐ Organization: Organize collection based on preservation needs. Begin labeling collection with their acquisition numbers.

☐ Acquisition/Deaccession: Create a list of examples of items you are looking for. Deaccession items that are unsalvageable.

Advanced Steps

☐ Inventory: Start using professional collection management software for your organization. There are a number of free cataloging programs out there.

☐ Organization: Have your collection fully organized; know where things go so that displaying.

☐ Acquisition/Deaccession: Consider deaccessioning objects that do not fit your organizational mission. Have a fully formed acquisition policy.
Introduction
Music librarians work in a universe bounded by the ridiculous and the sublime, but many of the extreme moments in our roller coaster existence involve donations. Donations of funds are usually sublime. The inner workings of these gifts are mercifully hidden from us; how much we know depends on institutional policy. We might get a copy of Development's letter to the donor who sent a check, or a memo from Counsel detailing restrictions on a gift from a will or trust. We seldom find ourselves directly involved in preparing formal documentation of a monetary gift.

"In kind" donations usually involve a healthy dose of the ridiculous and have a 99% chance of trapping us in a web of time-devouring minutiae.

Development officers get calls from donors who want to give gifts of stock or set up trusts, or donate buildings. Not us. When we pick up the phone, the people on the other end of the line offer us:

- a basement full of mildew-ridden LPs in lurid color covers with titles like Attack of the Killer B Sides, Georg Solti's Bear Down Bears, and The 1,001 Strings do Bartok.
- boxes of "really old, valuable music" that were Schirmer editions before the mice nested in them.
- a set of "music oral histories" that turn out to be a middle school class project -- 30 undated and utterly undocumented cassettes, all labelled "Grandma talking and playing her piano" in various charming childish labels.

http://www.lib.uchicago.edu/e/su/cja/deedofgiftold.html
scripts.

- "my rare jazz home movies" (foreign bootlegs of commercially released material), or "my opera collection" (tapes of the Met's radio broadcasts) -- for which the donor plans to take a hefty tax deduction.

- "Sun Ra's equipment" -- no provenance, of course -- supposedly found by a junk man in Chicago. "Send money now to save it for posterity."

The best thing the IRS ever did for music librarians was prohibit us from valuing incoming collections. Otherwise, we'd be at constant risk from irate donors pelting us with near-worthless material when we give them the bad news. Heaven help us, we sometimes accept useless items to get the good stuff: Grandma's collection of 1920's song sheets; pictures of Uncle Bob when he subbed in with Woody Herman one night; Lomax field recordings stuck in with the Country Christmas albums. "Send the out of scope stuff to the book sale," we cry. But hell hath no fury like the donor who can't find his gift of "rare" K-Tel's ("Not Available in Stores!) in the catalog, nor like Grandma's when she finds out that her "confidential" comments about the in-laws are posted on a researcher's website!

These all-too-common outcomes of donations mean hard feelings at best (and lawsuits at worst) for the library. Using a Deed of Gift to document a donation can help reduce the risks for the library by spelling out everyone's expectations for how the gift will be processed, housed, and used.

**What's a deed of gift?**
It's a contract, a legally binding written agreement between the library and the donor containing the negotiated details of how the gift is given, used, and disposed of. The Society of American Archivists has a good working definition:

"DEED OF GIFT A signed, written instrument containing a voluntary transfer of title to real or personal property without a monetary consideration. Deeds of gift to archives or manuscript repositories frequently take the form of a contract establishing conditions governing the transfer of title to documents and specifying any restrictions on access or use. A deed of gift is also known as an instrument of gift."


**What should a deed of gift contain?**
- Names of donor and institution
- A statement that legal ownership of the materials is being transferred and that the deed of gift is the documentation of the transfer
- Statement that the gift is irrevocable
- A clear description of the material being donated
- Procedures for dealing with items not wanted by the institution and for deaccessioning materials at a later time
- Date and signatures of donor and someone empowered to agree to the terms on behalf of the library

The Society of American Archivists has a brochure available that explains the purpose of a deed of gift to donors. Paper copies of this and other excellent SAA publications can be ordered from the SAA website; the text is available online as well.

http://www.lib.uchicago.edu/e/su/cja/deedofgiftold.html
Using sample deeds of gift

I have provided some sample deeds of gift, variations of which have been used at the Chicago Jazz Archive. Since these deeds of gift were drafted to document specific donors and gifts, please DO NOT simply download and use them as is -- that would be a disservice to your institution and to the donor. This is not just a matter of my disclaiming responsibility for what others do with my forms, though of course I must. More importantly, every deed of gift is different and reflects the circumstances surrounding the particular gift -- there is no such thing as a universal deed of gift form. While it is educational to examine deeds of gift from other institutions, keep in mind that the laws of contract and charitable giving vary from state to state, and you should be using a basic deed of gift form approved by your institution's counsel.

A good place to start learning about deeds of gift is your library's Department of Special Collections, since they deal with manuscript and rare book donations on a regular basis and usually have forms on hand. Then call Counsel's office and ask the secretary if they have guidelines and basic forms available, the policy for having Counsel review drafts before signing, and who is empowered to sign deeds of gift on behalf of the institution. Don't be surprised if you as music librarian are not empowered to sign deeds of gift, or are empowered to sign only for donations of a certain type or value. Try to get some guidelines about which deeds of gift you are empowered to sign.

Other considerations in documenting a donation

- **Timing of the gift.**
  Is the gift coming during the donor's lifetime, or afterward? If after death, is the deed of gift mentioned in the donor's will? Does the donor plan to retain part of the material for personal use, and convey the rest later?

- **Who pays for the appraisal?** While this is an issue for large or very valuable collections and involves IRS paperwork, it also comes up with small collections. The IRS prohibits the receiving institution from appraising a prospective gift, but many institutions go a step further and refuse to even pay for the appraisal. This preserves the institution's appearance of objectivity in case there is a later dispute about the valuation of the collection. If the institution chooses and pays an appraiser, the donor may later accuse the institution and appraiser of working together to under-value the collection and deprive the donor of a full tax deduction. A donor providing a box of LPs can be referred to used recordings catalogs and websites (and local thrift stores) to get an idea of what used LPs are worth, which is generally much, much less than they think! Be sure to find out what your institution's policy is on appraisals, and on reporting gifts so that the Library's insurance coverage can be adjusted.

- **Access to the materials by donor, family, designees**

- **Restrictions on the gift.**
  "NO RESTRICTIONS" is the ideal, but be realistic and graceful about reasonable restrictions. In extreme cases you may wish to decline the gift. A requirement that the gift be physically kept together is often problematic, especially when the materials are in different formats or require different storage conditions.

- **Explicit permission for exhibits, web, broadcast, media, researcher use**

- **Pre-existing agreements**
  Donor's agreements with other parties such as interviewees and recording companies may restrict the Library's use of the materials or leave the Library responsible for unforeseen expenses.

- **Does Donor have legal ownership (not just possession) of the materials in question?**
  You want a statement from Donor that s/he does.

- **Statement of donor's copyrights in the material, and whether copyright is being transferred.**
• **Who pays to move the collection?**
  This can run $5,000+ for large recording collections located out-of-state.

• **Who pays for processing the collection?**
  Donors seldom realize how much it costs to process a collection; try to educate them and encourage monetary donations to help defray the Library's costs.

**Common sense: when to "just say no"**
There are some collections that are just not worth the trouble unless everything is nailed down twice, and sometimes they're still not worth it. Usually there are clues to which ones these are. Trust your instincts; if you feel queasy about the situation, you're probably right. Tell the donor you have to check with your institution's counsel before going any further. Any of the following should cause you to reach for the Tums and the phone simultaneously:

1. **Donor has taped material off the air or television for personal use, but wants to donate the material and take a tax deduction.**
   Donor probably has legal ownership for the materials as copies made for PERSONAL USE, but accepting these materials and providing them for others to use is probably a copyright violation.

2. **Donor shares legal ownership of collection, and owners disagree about disposition of materials.**
   Families, usually. You DO NOT want to be in the middle of this. Insist on deeds of gift from ALL legal owners before accepting a collection.

3. **Donor claims to own the copyright but you are aware that there were co-authors.**
   Same as above. You need proof that the co-author relinquished copyright to the donor, or a deed of gift from the co-author.

4. **Donor does not understand the consequences of the donation, or appears to be under undue pressure from others to make the donation.**
   **Sirens and Alarm Bells! Do Not** accept collection. This one could get the Library into major problems if the donor is incapable of entering into a binding legal agreement, or has been coerced. It may be possible to accept such a collection once Counsel has assessed the situation and determined that there is someone who can convey ownership of the collection. Play it safe -- no matter HOW tempting the collection is. If anyone beats you out for this collection, they're going to deserve the headaches that are guaranteed to follow.

5. **Donor mentions that s/he has been talking to another institution besides yours.**
   Donors play institutions off against each other; try speaking with the other librarian. It's sometimes possible for institutions to share a gift.

6. **Donor wants collection processed and/or exhibited by a certain date but is unwilling or unable to assist with funding.**
   Reality check. You don't want to promise something you can't deliver, esp. when there's a legal document the donor can point to showing that you agreed to do it, and didn't.

7. **Donor insists that donation is all-or-nothing, and most of it is out-of-scope**
   Beware if accepting a Bernstein-annotated conductor's score also means accepting and exhibiting the donor's entire collection of 100,000 used golf balls. (See #4, above.)

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**Links to Deed of Gift Resources**

**Materials**
- [Deed of Gift](http://www.lib.uchicago.edu/e/su/cja/deedofgiftold.html) from a composer/musician courtesy of the American Music Center
• Sample deeds of gift from the Chicago Jazz Archive
• Society of American Archivists Guide to Deeds of Gift

Oral Histories

• Fieldwork guide and forms from the Library of Congress Folklife Center Principles and Standards of the Oral History Association
• NEH approved guidelines from the Dickinson College Oral History Program Guide to Oral Histories from the Southern Oral History Program at UNC.
• Indiana University Oral History Research Center
  • Deed of Gift
  • Informed Consent
  • Oral History Techniques
• Legal forms and resources from the UCLA Oral History Program
• Oral History Primer from UC-Santa Cruz

Suggestions · University Home Page · University Library Home Page · Questions and comments about this page?

The University of Chicago Library
1100 East 57th Street Chicago Illinois 60637
Phone Numbers
Page last generated on: 31 July 2006 at 10:30 PM CDT
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Deed of Gift

Date: ______________

I, ______________, donate the object/s described below to the ____________ (institution). The donor, ______________, acknowledges and accepts that the ________________ (institution) will be the owners of the object/s, with the rights to do with said objects as it seems fit; including use for research, education, display or disposal.

Donor Signature:

__________________________________________

Intake Coordinator:

__________________________________________

Description of donation:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Access Restrictions:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Contact details of the donor/s:

________________________________________________________________________
________________________________________________________________________
Accession Form

Accession #: __________________

Accession Date: ______________

Collection Name: _____________

Date Received: _______________

Received By: _________________

Acquisition Type

☐ Loan
   By: ____________________________________________________________
   Old Collection Name: ____________________________________________
   Old Number: __________________________________________________

☐ Purchase
   Price Paid: _____________________________________________________
   Purchased By: __________________________________________________
   Seller Name: ____________________________________________________
   Seller Phone/Address: ___________________________________________

☐ Donation
   Donor Name: ____________________________________________________
   Donor Address/Phone: ___________________________________________

☐ Other
   Notes: __________________________________________________________

Notes:
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Approved By: _____________________________________________________
Cataloging Form

Object Name/#: __________________

Accession #: ____________________

Today’s Date: ____________________

Acquisition Date: ____________________

Date of Object Creation: ____________________

Donor: ____________________

Object Type:

- ☐ Book
- ☐ Letter
- ☐ Diary
- ☐ Newspaper
- ☐ Photographs
- ☐ Textile
- ☐ Art
- ☐ Ceramics
- ☐ Furniture
- ☐ Other Physical Object ________________ (type)
- ☐ Other ____________________________

Object description:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Condition:

- ☐ Good
- ☐ Fair
- ☐ Poor

Condition Details:

________________________________________________________________________
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Notes:

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<th>Donor</th>
<th>Object Type</th>
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Deaccession Policy
Approved by the Board of Trustees, 5/3/1984

For the purpose of this policy, deaccession is the process of removing permanently from the collections accessioned museum objects and library materials. The deaccession process shall be cautious, deliberate, and scrupulous.

1. Deaccession criteria. Materials to be considered for deaccession must meet at least one of the following criteria. The material or object:
   a. is outside the scope of the charter purpose of the museum and its acquisition policy.
   b. is irrelevant to the purpose of the museum.
   c. lacks physical integrity.
   d. has failed to retain its identity or authenticity, or has been lost or stolen and remains lost for longer than two years.
   e. is a duplicate.
   f. is unable to be preserved properly.
   g. is deteriorated beyond usefulness.
   h. has doubtful potential utilization in the foreseeable future, or has accidentally been accessioned twice.

2. Restrictions. Before any material or object is recommended for deaccession or is deaccessioned, reasonable efforts shall be made to ascertain that the museum is legally free to do so. Where restrictions to the disposition of the material or object are found, the following procedure shall be utilized.
   a. Mandatory conditions of acquisition will be strictly observed unless deviation from their terms is authorized by a court of competent jurisdiction.
   b. In an event of a question concerning intent or force of restrictions, the staff shall seek the advice of legal counsel.

3. Procedure. The director may recommend deaccessioning material or an object if, in his/her best judgment, one or more criteria for deaccession have been met. The recommendation must be in writing to the board of trustees. Such recommendations will specify the source and/or provenance of the material or object, the reasons for deaccessioning, the estimated market value, and the recommended means of disposal which may include exchange, sale (negotiated, private, public auction, sealed bid, or open bid), destruction, or transfer to another museum or library. Board of trustees approval is required for actual deaccession.

4. Ethics of sale. Materials and objects shall not be given, sold, or otherwise transferred, publicly or privately, to museum employees, officers, trustees, or their families or representatives.

5. Proceeds. All proceeds resulting from the deaccession of objects form the permanent collections of the museum shall be deposited to, and only to, the credit of the acquisitions fund.
6. Public disclosures. All materials or objects subject to restrictions shall not be deaccessioned until after the staff has made an effort to:
   a. Comply with the restrictions.
   b. Notify the donor, if alive, or his/her heirs or assigns, if the material or object was accessioned within 10 years.

7. This policy is ordered printed by the board of trustees and a reference to it shall be imprinted on all Instruments of Gift of the museum. A copy shall be made available to any donor or prospective donor upon request.

8. Further, a list of all materials and collections which have been deaccessioned from the permanent collections shall be kept current by the director and may be distributed in response to any responsible inquiry.

--------------------------------------
Shiloh Museum of Ozark History, 118 W. Johnson Ave., Springdale, AR  72764
479-750-8165; shiloh@springdalear.gov; www.springdalear.gov/shiloh
Deaccession Form

Object Name/#: ______________

Today’s Date: ______________

Accession #: ______________

Object Type:
- Book
- Letter
- Diary
- Newspaper
- Photographs
- Textile
- Art
- Ceramics
- Furniture
- Other Physical Object ______________ (type)
- Other ____________________________

Reason(s) for Deaccessioning:
- The object does not fit with the institutional mission and its acquisition policies
- The object is physically degraded to the point it is unable to be displayed and/or unable to be used for research (lacks informational value)
- The institution is unable to care for the object
- The object lacks historical integrity
- The object suits another organization better
- The object has been obtained unethically or illegally
- The object has to be removed due to national and/or state laws
- The object has to be removed because of health concerns
- Other: ________________________________

Deaccessioning Recommended By:

__________________________________________________________________________

Deaccessioning Approved By: (someone other than recommender)

__________________________________________________________________________
Preservation
Preservation

Shari, Heather, Kate

Priorities

What will have the greatest impact on the largest number of objects?
Collection level, do not focus on individual objects

What is really possible in the institution?
Small changes can have a big impact!

What action will have the greatest visibility?
Affects public interest and funding opportunities

From NEDCC's Assessing Preservation Needs

Climate--Humidity

Aim for stable humidity between 30-50% R.H.
Some metals and minerals require very low R.H
Aim for climate that is best for majority of collection items

If humidity is too high:
Promotes mold growth
Causes corrosion

If humidify too low:
Causes embrittlement
Climate--Humidity

If humidity fluctuates
- Causes most damage
- The more rapid the change, the more destructive
- Worst for "composite" objects made of more than one material

Causes of fluctuations
- Temperature changes
- Seasonal changes/weather
- Inconsistent use of climate control equipment

Climate--Temperature

Aim for stable temperature between 35-65°F

Most collection items like being cooler than people do
If temperature is too high:
- Speeds deterioration
- Some materials may melt or warp

If temperature is too low:
- Materials may become brittle

Climate

Keep environment as stable as possible
- Aim for maximum 3% daily variation in temperature and R.H.

Temperature and humidity affect each other
- Too much heat in winter can bring humidity dangerously low

Be aware of microclimates within building
- Take multiple readings in different places
- Take advantage of cooler areas for storage, if possible

Direct sunlight raises temperature dramatically
Pollutants

Airborn pollutants
- Dust, chemical compounds, etc
- Cause chemical decay as well as abrasion
- Can be filtered out

Contact pollutants
- Eg. transfer of acid from paper to neighbouring objects
- Danger from non-archival storage

Pollutants

Intrinsic pollutants
- Pollutant is part of object, eg. acidic paper
- Object decays naturally—may not be preventable, but proper storage will prolong life

Light

All light causes damage
- Visible
- Infrared
- Ultraviolet

Ultraviolet light is most destructive
- Effects are cumulative and irreversible
- Fading of pigments and dyes
- Structural deterioration
Light

Minimize amount of time objects are exposed to light
  - Cover windows when not in use
  - Turn off electric lights when not in use
  - Rotate items on display
  - Store archival materials in boxes

Minimize intensity of light
  - Avoid direct sunlight whenever possible
  - Consider adding UV filters to windows and bulbs

Pests

All organic materials are susceptible

Main types of pest:
  - Microorganisms (mold, mildew)
  - Insects
  - Rodents

Pests are specialized—different materials attract different pests

Focus on prevention—established infestations may require professional help

Consider Not Accepting Anything...

That requires more conservation or processing than your budget will allow.
That demands storage requirements that you cannot meet.
That cannot be accessed without specialized equipment that you don’t own.
That is now or may become hazardous materials.
Acid-free, lignin-free, & buffered

Acid-free: has a pH above 7 (is not acidic)
Lignin-free: lignin is a substance found in wood that makes paper stronger short-term. However, it is unstable and breaks down over time, and eventually will cause the paper to deteriorate. Lignin-free paper is considerably more stable.
Buffered: paper that has had calcium carbonate added to it, which helps neutralize any acids it may encounter in its environment.

Storage

Recommended Materials for Storage

Acid-free, lignin-free, buffered file folders, paper, and tissue paper
Acid-free document boxes and cardboard boxes
Uncoated polyester, polypropylene, or polyethylene sleeves
Inert storage is just as important to physical objects like metal and textiles as it is to photographs and paper documents
--If possible, remove non-stainless steel fasteners like paper clips and staples, or protect the documents with a barrier of chemically stable paper--

Recommended Materials For Display

Ideally, your display materials should be as stable as your storage materials
Most wood, cardboard, and some plastics are not stable
Display materials that place undue stress or pressure on items (like spring loaded mounting brackets used for ceramics and glass) are not recommended, even short-term
When large items are not on display or the museum is closed, make sure they’re covered with cotton sheeting in order to protect them from dust buildup
Handling

Make sure your hands are clean and dry; washing your hands is preferable to hand sanitizer.

Gloves?
- Yes for photographs and metals
- Acceptable but unnecessary for ceramics and textiles (make sure any jewelry that may snag or scratch is removed)
- No for documents/paper, particularly if it’s brittle

Cotton gloves are ideal (and reusable and machine washable)

Handling

Whether paper, photograph, ceramics, textiles, metal, or furniture, it is probably more fragile than it appears to be

Staff/volunteers should educate visitors or researchers on proper handling of items (if they are allowed to handle them)

Scanning and photocopying of items should be done by staff or volunteers, not researchers or visitors

Emergency Preparedness, Response & Recovery

Types of Disasters

What can we do to prevent or lessen the impact of disasters?
Northeast Document Conservation Center (NEDCC) has an on-line system for creating a plan called DPLAN. There are many other examples available for cultural heritage institutions that you can use as a template. See the links for additional resources.

Have a Plan!

Prepare

Perform a risk assessment.
Know your buildings.
Know your collections.
Build a network of people, institutions and organizations.
Train your staff and volunteers.

Respond

Safety first!
Assess damage to buildings and collections.
Execute your plan.
**Recover**

Resume operations when it is possible to do so.
Evaluate disaster plan and response efforts.
Revise as needed.
Maintain and grow the alliances you have built.
Share your experience with your colleagues and learn!

**ICPC**

“The Iowa Conservation and Preservation Consortium’s mission is to initiate, encourage, and enhance preservation and conservation activities in and among all Iowa repositories and institutions whose collections include a variety of materials such as audio-visuals, microforms, paper-based, and electronically-stored information for the benefit of present and future generations.”

**No Need to Reinvent the Wheel!**

NEDCC - Northeast Document Conservation Center
AIC - American Institute for Conservation
CoOL - Conservation Online
ICPC - Iowa Conservation and Preservation Consortium

Source: www.iowaconserveandpreserve.org
Other Places to Look...

NARA - National Archives & Records Administration
LOC - Library of Congress
Heritage Preservation.org
Smithsonian Institution
Action Steps

First Steps

☐ Get to know your buildings and your collection by filling out the assessment worksheets. Identify which areas and collections are priorities.

☐ Gather information on local emergency services. Find out who will be responding to your disaster.

☐ Visualize your ideal storage and display options. Get a sense of the space with which you have to work and what would make the most sense for your collection and patrons.

☐ Consider joining the Iowa Conservation and Preservation Consortium for disaster support, learning opportunities and statewide preservation information.

Next Steps

☐ Create a basic disaster plan.

☐ Prioritize collection for evacuation or salvage. Identify materials with specific or unusual environmental needs.

☐ Modify your collections management recordkeeping to include item location so you will know what has been impacted by a disaster and where to locate items you have identified as salvage priorities.

☐ Continue to monitor your environment. Make small changes to maximize environmental stability with the facilities you already have.

☐ Remove metal fasteners like pins, paper clips, and staples where possible.

☐ Organize items within disorganized collections by size and shape, which will allow you to efficiently store items better.

☐ Create a storage plan that clarifies how you can maximize your space, best store your items. Identify the materials and labor you will need to implement the plan.

☐ Assess the materials used to display collections on exhibit. Take note of items that are chemically unstable or can cause damage to your collection.
Advanced Steps

☐ Train staff and volunteers to execute your disaster plan and gather necessary supplies.

☐ Make contact with the emergency services personnel who will be responding to your facility in the event of a disaster. Provide them with information about your buildings (floorplans, utility shut-offs, etc.), and your collections.

☐ Make connections with other cultural heritage organizations and institutions. Having a network will increase your knowledge, expertise, opportunities and options should disaster strike. It is good to have friends!

☐ Install an HVAC system. Maintain a cool, dry, stable environment year-round.

☐ Implement your storage plan. Transfer your collections in storage to chemically stable (acid-free, lignin-free, buffered) folders and boxes.

☐ Replace insufficient display materials (wooden quilt clamps, spring-loaded mounting brackets, acidic frames and mats) with chemically inert materials.
Low Cost/No Cost Improvements in Climate Control

The following suggestions are from a project by William Lull, a principal at Garrison/Lull in Princeton Junction, New Jersey, to help the New York State Division of Library Development create guidelines for improving environments in libraries, archives and similar institutions. Some of the tips may not be advisable, applicable, or feasible for your institution. Please consult a conservator about the relative value of the measures you choose to undertake.

1. **Keep winter heat low:** If overheating occurs, don’t allow windows to be opened — demand that the heat be turned down. Open windows and leaky doors allow outside air in, and allow desirable winter humidity to escape. Keep a few sweaters and blankets for staff or visitors who feel cold with the temperature around 65øF, and explain why you’re keeping things cool. A small exhibit of damaged paper may help convince visitors.

2. **Seal windows:** Use plastic sheets and tape to seal windows on the inside in winter. In storage areas, line windows with aluminum foil, and seal them more completely with gypsum wallboard and plastic. The foil will reflect sun away to reduce heat in summer, and will also keep light out of the storage areas.

3. **Keep outside doors and windows closed:** Weatherstrip doors, and make sure doors and windows stay closed to prevent exchange of unconditioned outside air. Test seals; if a strip of paper waves in the breeze when it's held up to a crack, the seal isn't tight.

4. **Block radiant heat from radiators:** If you can't move collections well away from radiators in storage or exhibit spaces, cover wallboard with reflective foil and position this barrier between radiators and collections to protect objects from "line-of-sight" heat transmission.

5. **Keep equipment at one level 24 hours a day:** Don’t change settings on climate equipment for nights or weekends, since damaging humidity fluctuations usually result. This includes both heat and window air conditioners. Be sure humidifiers or dehumidifiers are on, and that they’re always adequately filled (or emptied) to maintain steady conditions. Choose a lower constant humidifier setting to prevent it from running out of water, or raise the constant RH setting on your dehumidifier so it will not overflow or shut off from too much water. (Of course this does not apply to equipment with piped water supplies or drains.) While improving the stability of conditions 24 hours a day usually requires little or no capital investment, using the equipment you have continuously almost always increases annual energy costs. Keep in mind that some of the most acute short-term damage to collections is caused by discontinuous operation of climate control equipment.
6. **Separate collections that need special conditions**: Use available spaces the best way: Look at the available storage areas. Can you modify your use of space to suit the collections better? Are some spaces more stable than others? Do some materials in your collections (like parchment or vellum) need different conditions from others? Can these be segregated into groups with similar needs? This may reduce the need for new or improved conservation environments.

Simple Policies And Practices You Can Immediately Implement to Help Preserve Your Collection

1. Wash your hands with soap and water before handling items, and use gloves when working with photographs and metal items. Remove any jewelry that might snag or scratch materials.

2. Avoid placing items in direct sunlight
   - If you are unable to do so, cover the windows or display cases when the museum is closed

3. Rotate items on exhibit

4. Turn off lights when not in use

5. Cover/close windows
   - Covering your windows with boards or curtains when the buildings are shut up (say, for the winter) will help insulate the building
   - Covering your windows will prevent light damage
   - Keeping windows closed will help maintain a stable environment

6. Cover large exhibit items with cotton sheeting to prevent dust buildup and damage

7. Dispose/de-accession any moldy or infested items ASAP
Building Environment Worksheet

Temperature and Relative Humidity

1. What machinery controls temperature and relative humidity? Describe its age and type.
   a. If the building is air conditioned, does the system also provide humidification and dehumidification? Does the equipment work?
   b. Does the climate control equipment operate 24 hours a day, 365 days a year in the areas where historical collections are stored?

2. What temperature and relative humidity is the climate control system designed to maintain? Does it do so?

3. What is the average actual temperature and humidity inside the building? Estimate if necessary and indicate prevailing conditions in the summer, winter, and during transition periods in spring and fall.

4. Is the environment in collections storage areas monitored on a regular basis? What equipment is used? Is the equipment regularly calibrated?

Pollution

1. Is there a mechanism for air circulation throughout the building? Are vents blocked by furniture or collections? Does air circulation seem to function effectively?

2. Where is the intake for building air replacement located? Does it take in vehicle exhausts, building exhausts, and so forth?

3. Is the air circulation system equipped with filters? To what level of protection? Do they filter particulate material, or particulates and gases?

4. Are all filters changed regularly? How often? By whom?

5. Is smoking prohibited in the building?

Light

1. What are the sources of natural light in collections areas?

2. Is sunlight entering the building controlled to minimize intensity and remove ultraviolet radiation?

3. Are shades, curtains, or blinds shut when sunlight is direct? When the room is not in use? When the building is closed?
4. What type of artificial lighting is used? If fluorescent lights are used, are they shielded to filter ultraviolet radiation?

5. Are lights turned off when collection storage areas are unoccupied?

6. How much light exposure do collections receive (e.g., are they mostly housed in boxes, how frequently are they used, are they exhibited)? How bright is the light? Has exposure been measured using a light meter or a UV meter?

**Pests**

1. Is there any history of insects, rodents, or other pests in the building? Is extermination done routinely? What is used? Is it effective? Is it necessary? Is the institution knowledgeable about integrated pest management strategies?

2. Are food and drink prohibited in collections areas?

3. If food is consumed in the building (by staff in offices or a staff room, or during special events), is a closed container provided for food waste, and is the staff instructed to use it?

4. Is garbage removed from the building daily? Immediately following events that include food?

5. Is there a well-planned and supervised housekeeping program? What does it include? Who does the work? Who supervises it and maintains quality?

*From NEDCC’s Assessing Preservation Needs*
https://www.nedcc.org/assets/media/documents/apnssg.pdf
External Threats and Water Protection Worksheet

*External Threats*

1. What is the history of natural (e.g., flood, hurricane, fire, earthquake) or man-made (e.g., water main failures, gas leaks, bomb threats) emergencies in the vicinity of the institution?

2. Have external events damaged historical collections in the past? How long ago? What was the extent of the damage?

3. What external threats would most likely cause damage in the future?

*Water Hazards*

1. Have the collections undergone significant damage from water (e.g., flooding, water leaks, mold) within the last five years?

2. Where are bathrooms, sinks, kitchens, and other plumbing, and where are collections in relation to them?

3. Are there any sources of water within the climate control system (e.g., air conditioners, circulating water)? Where are these in relation to collections?

4. How old is climate-control equipment and plumbing? Is it well maintained? Are pipes inspected for signs of corrosion, failed seals, or other damage? Is there any history of leaks?

5. If collections must be stored where they are vulnerable to water damage, is there a water alarm system in place that is monitored 24 hours a day?

6. Are all collections stored at least 4 inches above floor level in all areas?

*From NEDCC’s Assessing Preservation Needs
https://www.nedcc.org/assets/media/documents/apnssg.pdf*
Fire Protection Worksheet

1. Have the collections undergone significant damage from fire within the last five years? If yes, please describe.

2. What types of fire detection devices are installed (e.g., smoke sensors, heat sensors)?
   a. Is the detection system connected to a 24-hour monitor?
   b. What and where is that station or agency? What would the speed of response to an alarm be?
   c. Is the detection system regularly maintained and tested? By whom?

3. Is there an automatic fire suppression system? What is the equipment (e.g., Halon, sprinklers, other)? Is the suppression system regularly inspected and tested? By whom?

4. If there are sprinklers, are they wet pipe, dry pipe, or pre-action?
   a. What is the activation temperature for the sprinkler heads?
   b. Do the heads discharge individually?
   c. Is there a sensor to automatically stop the water flow when the fire is extinguished?
   d. How would an accidental discharge be detected and controlled?

5. Are portable fire extinguishers available? Where? What type? Are they inspected yearly? Has staff been trained to use them?

6. Is there an evacuation plan for the building? Are fire drills held? How frequently?

7. Has there been a fire safety inspection of the building by the Fire Department or Fire Marshal within the past year?

8. If there is a book drop that opens into the building, how is it secured against vandalism or arson? Is there a smoke/heat detector directly above the opening? Could the book drop be eliminated?

*From NEDCC’s Assessing Preservation Needs
https://www.nedcc.org/assets/media/documents/apnssg.pdf
Disaster Planning Worksheet

1. Does the institution have a written disaster plan? If yes, when was it first prepared?
   a. Who is responsible for implementing and updating the plan?
   b. Has it been updated within the last year?

2. Have any staff members been trained in disaster planning and/or disaster recovery? How many? What is their position?

3. Are basic supplies for emergency response on hand and reserved only for emergencies (see list provided in text)? Where are they stored?

4. Is updated contact information available for potential service providers (e.g., local freezer storage space for wet collections, vacuum freeze drying vendors, building dry out vendors)?

5. Are duplicate collection records stored off-site?

6. Has staff identified salvage priorities for the collections in the event of a disaster? Does the fire department know these priorities?

7. Have staff responsibilities for disaster response been assigned, and does everyone know his or her role? Do staff members have a basic familiarity with methods for salvaging wet collections? Are periodic training sessions held?

8. Are collections insured against disaster damage? What risks are covered? What costs would the insurance cover (e.g., labor, vacuum freeze drying, conservation, freezer space)?
   a. Are collection records current and detailed enough to satisfy the insurer? What procedures does the insurer require in the event of a disaster?
   b. Is special insurance coverage needed for valuable portions of the collection?

*From NEDCC’s Assessing Preservation Needs
https://www.nedcc.org/assets/media/documents/apnssg.pdf
Worksheet For Individual Storage/Exhibition Areas

(Use one sheet for each space to be surveyed)

Name of Room: __________________________ Approximate size of room: _________

Location in Building: ________________________________

What historical materials are stored in the room? What types of storage furniture are in the room? Is there a shortage of storage space?

Temperature and Relative Humidity

1. What climate control equipment serves the space? Is there heating? Cooling? Humidity control?

2. What are the current temperature and relative humidity (on the day of the survey)?

3. What are the normal temperature and relative humidity in the space? Are there fluctuations during the year?

4. Are temperature and humidity monitored in the space? How?

Pollution

1. How are pollutants controlled in the space? Is there a coating of dust in the collections storage areas that might indicate inadequate filtration? Are page edges significantly more discolored or brittle than their centers? This also suggests a high level of pollutants.

Housekeeping/Pests/Mold

1. Is the space clean or dirty? Is it cluttered? What is the housekeeping schedule for the space?

2. Are there any indications of pest infestation (e.g., droppings, insect bodies, shredded paper, stains or damage in bindings or paper)? Is there a history of pest infestation in the space?

3. Is there evidence of current or past mold on collections? Is there a history of mold in the space? Have the leaks or climate conditions responsible been corrected?
**Light**

1. What artificial lighting is used in the space? If fluorescent, is UV light filtered? What are the light levels?

2. What are the number, type, and size of windows in the space? What direction do they face? Do they have shades or drapes? Are these used, and if so, when? Are the windows filtered to remove UV light and reduce the intensity of visible light?

3. Is there evidence of light damage to collections (e.g., faded media, yellowed paper, faded bindings or spines)?

**Water Hazards**

1. Are there water-bearing pipes in the room? Where are they in relation to collections?

2. Is there any evidence of current leaks on the walls or ceiling? Is there evidence of previous water damage (e.g., stains, efflorescence, plaster damage, mold), especially in basement and attic areas?

3. If there are known water hazards in this space, is an alarm system in place?

4. Are all collections in this space at least 4" above floor level?

**Fire Hazards**

1. What electrical equipment is in use in the space? Is the wiring adequate? Is there any history of blown fuses or electrical failure in this space?

2. Is the space equipped with smoke and/or heat detectors? A portable fire extinguisher? Automatic fire suppression?

**Security**

1. Is the space accessible to the public, or to staff only?

2. Is the space kept locked? ______ Is there a security system? ______ If so, who has a key and/or an access code? Does everyone who has access to the space actually need it?

3. If researchers are allowed in the space, are they observed at all times?

*From NEDCC’s Assessing Preservation Needs
https://www.nedcc.org/assets/media/documents/apnssg.pdf*
General Storage Worksheet

1. Who on staff is responsible for choosing shelving units and storage materials?

2. What kinds of storage furniture (e.g., map files, compact shelving, free-standing shelves, file cabinets, microfilm cabinets) are in use?

3. Is sufficient furniture available for orderly, uncrowded storage of all collections?

4. Are shelves or cabinets large enough to support objects completely?

5. Is there good air circulation around collections?

6. Are wooden shelving units or cabinets used for storage of historical collections? Where and for what materials?
   a. What type of wood is used? Are any composite materials used, such as particleboard or plywood?
   b. Have these storage units been sealed? With what?
   c. Is there any barrier (e.g., archival box, phase box, metallic laminate, glass, Plexiglas) between collections and wood?

7. In general, what types of enclosures are used for collections?
   a. Are plastic enclosures made from stable plastics?
   b. Are paper enclosures lignin-free and buffered?
   c. Do photograph enclosures pass the Photographic Activity Test?

8. From what supplier(s) does the institution purchase enclosures?

*From NEDCC’s Assessing Preservation Needs
https://www.nedcc.org/assets/media/documents/apnssg.pdf
HOW TO PROTECT YOUR BOOKS

The book is an ingenious invention. Compact and portable, it has been the primary means of transmitting and preserving mankind’s accumulated knowledge for hundreds of years. Throughout that time, printers and bookbinders have used a wide variety of materials and structures. Some have proven to be remarkably durable; others have been vulnerable to chemical deterioration and mechanical stress. While these problems can be quite complex, a few simple preventive measures can greatly extend the life of a book.

ENVIRONMENTAL CONDITIONS

Books are composed of a variety of materials: paper, cloth, leather, paste, and glue. These, like all organic materials, are vulnerable to conditions and changes in the environment in which they are kept. Key factors are light, temperature, and humidity.

Books should not be exposed to excessive amounts of light. Daylight and fluorescent light, which have high levels of ultraviolet radiation, cause the most rapid deterioration and fading. Normal incandescent house lights are less harmful, although all light causes some damage. Keep lights turned off in rooms that are not in use. Block daylight by using curtains, shades, or plastic filtering films.

Similarly, books should not be exposed to rapid changes or extremes in temperature and humidity. Hot and dry conditions will desiccate and embrittle leather and paper; damp conditions will encourage mold growth. Therefore books should not be kept near sources of heat, such as radiators or fireplaces. Bookshelves should not be placed against outside walls, where pockets of cool damp air can develop. Air conditioners, dehumidifiers, and humidifiers can be used to remove or add moisture or heat. A cool, dry, and stable environment is ideal. Where the book rooms are in regular use, around 70 degrees Fahrenheit and 50 percent relative humidity is recommended.

SHELVING

It is extremely important that books stood vertically on shelves are squarely upright and firmly supported by neighboring books or by bookends. Leaning at an angle puts stress on the entire book structure, deforming the spine and the joints where the covers are attached. Bookends must be stable and smooth so as not to damage the covers. Books should not be packed together so tightly, however, that they are difficult to remove without causing damage. Large, oversized books are best laid horizontally in stacks of no more than two or three high. Protective pads, such as squares of polyester felt, may be placed between stacked books to prevent them from rubbing.

Books on a shelf should be kept an inch or so back from the edge. The bare ledge of shelf will show up dust and droppings signaling insect activity. However books should not be pushed to the back of the shelf. Good air circulation is imperative to prevent stagnant air pockets where condensation will collect and mold will grow.

Important or fragile books may require additional protection. Check with a conservator about the variety of available solutions: polyester book jackets and wrappers, wrappers made of lightweight alkaline paperboard, double-tray boxes, and book shoes.

STORAGE

When books must be packed away for storage, do not wrap them in common household plastics (plastic kitchen wrap, garbage or cleaner bags) because these emit harmful gases as they degrade. Storage boxes made from alkaline corrugated cardboard designed for the purpose are available from conservation suppliers. Avoid storing boxes of books in attics, garages, or basements, where temperature and humidity fluctuations are great, where pests may be a problem, and where leaks or floods are common. Always allow at least four inches of space between the boxes and the walls, ceilings, and floors.

Many book materials are attractive to pests. Rats and mice, silverfish, and a host of smaller insects are common troublemakers. Watch carefully for signs of their presence. Vigilant housekeeping discourages them. If there is an infestation, consult a conservator.

HANDLING AND USE

Most books are not museum objects: their purpose is to be used and read. The handling of books, however, provides opportunities for accidental damage.

Handle books only with freshly washed hands. Most of the dirt on book covers and pages is accumulated grime from oily fingerprints. While invisible initially, finger grease becomes all too visible as it oxidizes and collects dirt. Wearing white cotton gloves for handling rare book covers and pages is accumulated grime from oily fingerprints. While invisible initially, finger grease becomes all too visible as it oxidizes and collects dirt. Wearing white cotton gloves for handling rare bindings is a good preventive measure, but turning fragile or brittle pages with gloves may cause damage and is not advised.

When removing a book from the shelf, do not pull it out by its headcap, which is apt to break. Either push the two neighboring books back in order to grab the spine in the middle, or stretch a finger along the top edge of the book and rock it back in order to grab the spine.

Avoid carrying tall, unstable stacks of books that may fall. If it is necessary to transport more books than can be held securely in two
hands, pack them snugly in boxes to prevent shifting and sliding. Never pack or shelf books fore edge down as this position suspends the entire weight of the book from its joints and pulls the text block out of its cover.

A book is designed to be cradled in the reader’s hands or lap; in this position very little stress is put on its spine or joints. Placing a book flat on a table can put tremendous stress on the structure, flattening the spine and stretching the joints. If a book must be opened on a flat surface, protect both covers by placing a support, such as another book, on either side. Alternatively, cradle the book in a towel with the two ends rolled up to support the covers.

Similarly, never place an open book face down onto a flat surface, which forces the book open to a 180-degree angle. If a book must be photocopied, use a photocopier with an edge platform that requires only a 90-degree opening.

Other important tips: Use pencil, never pens (especially ball point and felt tip pens) on books as ink may run, bleed, or transfer onto other pages. Use only paper bookmarks, rather than metal or leather, which will tear or stain the pages. Avoid paper clips and other mechanical fasteners. Do not use the popular self-sticking memo slips as these leave an invisible residue of adhesive on the page to attract dirt. Avoid storing newspaper clippings, flowers, letters, or other miscellaneous material in books as they leave stains and stress the binding. And of course avoid eating, drinking, and smoking around books as the spills and stains are generally permanent.

CLEANING AND MAINTENANCE

Books and book collections need to be cleaned regularly to remove accumulations of dust and dirt and to monitor their condition.

When dusting the edge of a book, be sure to wipe away from the headcap toward the fore edge, with a clean cloth or soft brush. Dirt brushed down the spine of the book is trapped there forever. A vacuum cleaner can also be used with the suction reduced. Cheese cloth or soft screening can be tied over the nozzle as an extra precautionary measure to catch any loose bits that might accidentally break off. More difficult dirt often can be removed by rubbing gently with a white plastic drafting eraser. Brush away the crumbs with a soft brush.

In the past, leather books were often oiled to improve their feel and appearance. Unfortunately this can also cause stains, make the leather sticky, and degrade paper. Recent tests have shown that dressings are only cosmetic and do nothing to prolong the life of the leather. Consult a conservator before using dressings on books.

EMERGENCIES AND MINOR DISASTERS

If books get wet, the affected material needs to be stabilized as rapidly as possible to avoid further damage. Mold growth is likely if the temperature is over 70 degrees and the relative humidity is over 60 percent for more than 48 hours. Wet books may be frozen to stabilize them; they can be thawed and dried at a later time. Wrap individual books in paper or interleave large numbers of books with paper. Pack each book’s spine down in waterproof containers or cardboard boxes lined with plastic. Freeze the books as rapidly as possible in a commercial freezer, a home freezer (for a few books), or outdoors if conditions are right. There are commercial companies that specialize in the salvage and treatment of books in large-scale water disasters.

Small numbers of wet books can be air-dried. The books should be stood up, fanned open, alternating spine to fore edge, with sturdy bookends at each end to prevent them from falling over like dominoes. Use fans to circulate the air and increase evaporation. Drop the room temperature as low as practical to discourage mold and use dehumidifiers or air conditioners to reduce the humidity. Books are dry when they feel warm to the touch. Once dry, place them flat with a weight on top to minimize warping. Most books air dry satisfactorily although some residual staining and distortion is to be expected. Unfortunately, clay-coated (glossy) paper will stick together irreversibly unless the pages are separated while the book is still wet. Interleave every wet page with absorbent paper; repeat the process (exchanging the wet paper for dry) until the pages no longer cling to each other. Stand the book up and fan it open to finish drying completely.

WHEN TO CONSULT A CONSERVATOR

Problems that are beyond an owner’s capabilities should be referred to a conservator. Visit AIC’s Find a Conservator at www.conservation-us.org to find a qualified conservator in your area.

ABOUT AIC

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CARING FOR CERAMIC AND GLASS OBJECTS

Many special objects are made of ceramics or glass. These materials include porcelain, earthenware, “crystal,” pottery, and art glass to name just a few. Jewelry, dolls, sculpture, tableware, tiles, kitchenware, and many other items can be made from ceramics and glass.

Ceramics are often classified by their body type. *Earthenwares* are porous ceramics that have been fired at relatively low temperatures. *Stonewares* are fired at a high enough temperature that the stoneware body is impermeable to water. *Porcelains* are very fine bodied ceramics that are fired at very high temperatures to create a vitrified, or glasslike, body.

Ceramics are often decorated with colored slips and glass slurries and are then glazed for decorative purposes or, in the case of earthenwares, to provide water impermeability.

Glass objects are made from a mixture of ground silica (sand) and other mineral modifying agents (usually metallic salts) that are melted together to create a molten glass. The molten glass is formed by a variety of methods, including molding and blowing, into a shape that is allowed to slowly cool and harden. If a glass object is not allowed to cool slowly and properly by a process called annealing, it will crack or shatter from uneven internal stresses.

The primary means by which ceramics and glass objects deteriorate is through accidental cracking and breaking. This is often a result of improper handling, shipping, storage, or display. Other sources of deterioration for ceramics and glass can include deterioration of the clay body or the glass as result of poor manufacturing methods or materials. Porous ceramics can also deteriorate due to the presence of soluble salts deep within the ceramic body itself. The salts dissolve and re-crystallize as the relative humidity fluctuates. When the salts re-crystallize they expand in size and crush the surrounding ceramic structures. You may have seen this happen with a flowerpot that has become saturated with fertilizer salts over time. Freezing water within the ceramic body may also damage porous ceramics that are left outdoors during winter.

Leaving liquids inside vessels for long periods of time can damage glass. Some constituents of the glass dissolve into the liquid, making the interior of the vessel appear cloudy or appear to have residue inside. All efforts to remove this “residue” will fail because the inside of the vessel has actually been etched away and may have a very fine network of surface cracks.

One might guess that earthenwares are more subject to deterioration than other ceramics due to their higher level of water permeability. Porcelains can be extremely fragile due to their highly vitrified nature. They are often made to have paper-thin, delicate walls and thus are subject to cracking and breakage.

HANDLING CERAMICS AND GLASS

A major source of damage to ceramics and glass can be improper handling and carelessness. A thoughtless tap of a glass goblet on the storage shelf can result in a chip or complete breakage. Careless handling can also lead to the formation of internal cracks that weaken the ceramic or glass structure. It is always best to overestimate the brittleness and underestimate the strength of an artifact. Of course, anyone who has poured hot water into a cold glass or mug and heard a delicate “chink” sound will recall the heartache of breaking a favorite piece.

When moving ceramic and glass objects, always carry one object or one part of an object at a time. It is best to place your hands around the body of the object rather than using an existing handle, rim, or spout for support. Be sure you have a level space of adequate size available to place the object, and a clear path to move, before removing the piece from its original location. Carry objects from room to room or up and down stairs in a padded basket or box rather than in your hands. If you were to trip or fall with your hands full, you would crush the object and most likely injure yourself as well. Use soft padding to prevent ceramic and glass objects from clinking against each other during transport or in overcrowded conditions.

STORAGE AND DISPLAY

Ceramics and glass, in general, should be stored and displayed on sturdy, level surfaces that are secure from bumps and jarring. Objects should be covered or enclosed to protect them from dirt and dust. If this is not possible for storage, pieces can be wrapped in acid-free, lignin-free tissue and stored in acid-free cardboard boxes. Newspaper and acidic newsprint paper can cause discoloration and stains and should not be used for wrapping or long term storage of ceramics and glass. Any box used for storage should be strong enough to support the weight of the objects inside and should have a secure bottom. The container should also be large enough to enclose the entire object. Objects should not be allowed to bump or fall against each other.

Ceramics are often displayed vertically on walls with spring-loaded mounting brackets. These brackets may exert too much pressure on ceramic plates and often cause cracks and damage. Other vertical plate racks are made that do not exert undue pressure and are much safer for your prized objects. Separate prongs can also...
be used in place of either type of mounting device. It helps to pad the part of the mount with a synthetic felt to prevent any scratching onto the surface of the object.

Another common problem in the display of ceramic and glass pieces involves the gradual, incremental movement of objects on surfaces due to underground vibrations. The movement can be caused by any constant, transmitted vibration source like subways, trains, underground equipment, and normal building vibration. Objects in museums are often carefully secured to their display surfaces with very small dots of soft wax to prevent them from “walking” off their display vitrines. Caution should be used, however, when using wax. One must take into consideration whether the wax may be safely removed from the object. There are expert conservators who have researched and studied ways to reduce earthquake-related damages to displayed objects. If you live in earthquake area and display important objects, you can get practice about these experts and their methods by contacting a local objects conservator.

CLEANING PRACTICES

Ceramics and glass objects should be kept free of dust, debris, and oily residues. In general, it is not a good idea to routinely wash these pieces. Each time a piece is handled for cleaning there is a greater risk of breakage through accidents and mishandling. It is better to protect pieces from soiling and dust in the first place, rather than wash them too often.

Porcelain ceramics, like earthenware, should never be immersed in water. They will absorb the water into the body like a sponge and draw surface stains of residues deeper into the ceramic body if left to soak. For cleaning any important ceramic or glass artifact, a conservator should first be consulted to ensure the objects stability and recommend safe cleaning methods.

OLD REPAIRS AND RESTORATIONS

A very common problem found with ceramic and glass objects is the presence of old repairs and restorations. Be very wary of previous repairs and restorations. They are sometimes very difficult to detect. Sometimes shining a black light on the object may help in distinguishing areas of previous repair. Older glues are weaker and more brittle than glues used today, and as a result, old restorations may have aged enough that they no longer support the broken pieces of the object. They often yellow and peel and become unsightly, as well as dangerous. Objects can sometimes just fall to pieces by themselves. Be extra careful when lifting or handling repaired ceramics and glass. Also, think very carefully before you decide to take a repaired object apart yourself. If the object is important to you, you might consider having a professional objects conservator examine it first and provide advice. A conservator can also carefully remove the old repairs and replace them with more stable and visually acceptable adhesives and paints.

WHEN DISASTER STRIKES

For ceramic and glass objects, the most serious threats during disaster situations are scratching and breakage. Objects that have become wet during an emergency should be rinsed with clean, distilled or deionized water and then dried with clean cotton or paper towels. Be careful not to scratch objects by wiping off grit or soil or by using towels that are dirty or gritty. If conditions are such that dry towels are not available, objects can be placed in the warm sun to dry.

Porous ceramics should not be allowed to remain wet or submerged in liquids. The permeable body will draw the dirty water and stains into the ceramic. If earthenware is already submerged or waterlogged you should contact a local conservator for advice about rinsing and drying the object.

WHEN TO CALL A CONSERVATOR

If you have questions about the care of your objects, call a professional conservator to get answers and additional information. If your object requires special intervention like cleaning, repair, restoration, or replacement of missing parts, you should contact an objects conservator. They will give you advice about the safest means by which to preserve and restore your special items. AIC’s Find a Conservator at www.conservation-us.org can direct you to a qualified conservator in your area.

ABOUT AIC

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A GUIDE FOR CLEANING, STORING, DISPLAYING, HANDLING, AND PROTECTING YOUR PERSONAL HERITAGE

DOCUMENTS AND ART ON PAPER

AIC
AMERICAN INSTITUTE FOR CONSERVATION OF HISTORIC AND ARTISTIC WORKS

CARING FOR YOUR TREASURES

Documents, manuscripts, and works of art on paper such as prints, drawings, and watercolors are inherently fragile but can be easily and effectively protected from damage.

PROPER CARE AND HANDLING

Handle paper objects as little and as gently as possible. When doing so, be sure that your hands are freshly washed. Window mats provide maximum protection for works of art on paper because they allow items to be viewed and transported without direct handling. Unmatted artwork and documents are more vulnerable. Transport them in folders and remove individual items with both hands.

When consulting documents, place them flat and at least three inches away from the edge of the table on a clean blotter or sheet of paper. Fragile or frequently used documents may be placed in polyester sleeves for added protection; surrogate copies may be substituted for the originals for display or use.

Do not undertake repairs on your own and never apply pressure-sensitive (self-adhering) tapes to valuable documents or artwork. Use folders to organize documents rather than attaching paper clips, staples, or rubber bands—all of which can cause damage.

STORAGE

Because paper is damaged by prolonged contact with chemically unstable materials, the choice of materials for storage and exhibition is critical. Mats, folders, and storage boxes should be made of cotton rag or 100 percent chemically purified woodpulp with an alkali reserve equivalent to two percent calcium carbonate and buffered to a pH of 7.5 to 10. Matboard and folders should be rigid enough to provide adequate support. Store artwork in mats or within individual enclosures that are larger than the items. Documents in good condition may be stored in groups within folders; the number of items per folder depends upon their size, thickness, condition, and the depth of the folder. Isolate newsprint and other highly acidic materials by storing them separately. Individual enclosures offer the best protection for damaged and fragile items.

Store matted works or foldered items in flat files or in appropriately sized boxes specifically designed for storing works of art or documents. Oversized objects should be stored flat whenever possible, not rolled or folded. They are best kept in the drawers of flat files (map cases), made of anodized aluminum or powder-coated steel.

If done properly with sound materials, matting and framing provides the best protection for art on paper. A brown cut edge at the window opening is a common sign of poor quality mat board. It is essential to choose a framer who uses proper materials and techniques. Adhesives used to attach the artwork to the mat must be chemically stable, non-staining, and readily removable. The essentials of proper matting and framing are described in a companion AIC guide, Matting and Framing Works of Art and Artifacts on Paper.

LIMITING LIGHT EXPOSURE

Exposure to light can cause fading of media, such as watercolor and writing inks. Such exposure can also yellow, darken, and weaken paper. Light damage is determined by the wavelength of the light, the length of the exposure, and the intensity of the illumination. Damage is cumulative and irreversible. Because all light causes damage, display works on paper for finite periods of time. Keep light levels low and eliminate daylight whenever possible. Block windows with shades, blinds, or curtains.

Light sources containing ultraviolet (UV) rays are especially harmful. UV is found in all daylight, most abundantly in sunlight, and in many fluorescent and metal halogen lamps. Incandescent or tungsten lights are preferred, but because they emit heat, place these light sources a distance from the artwork. UV filters to screen out UV radiation may be purchased for fluorescent tubes, windows, or cases.

CONTROLLING TEMPERATURE AND RELATIVE HUMIDITY

Keep objects in a cool, dry environment. Maintain a temperature below 72 degrees Fahrenheit with relative humidity (RH) between 30 percent and 50 percent. Warm or moist conditions accelerate deterioration, and encourage mold growth and insect activity. Keep temperature and RH within a narrow, constant range. Climatic fluctuations cause papers to expand and contract. This movement, although
slight, can lead to structural weakening of paper, undermine the attachment of media, and cause distortions such as buckling of paper.

Frames and storage enclosures provide some degree of protection against daily fluctuations but will not protect paper from long-term or seasonal changes. Portable dehumidifiers can help control high levels of RH and fans that help circulate air can discourage mold growth. Humidifiers may be used in areas where extremely low RH occurs during the winter. Do not store works of art in basements or attics, or hang them in bathrooms or over heat sources.

LIMITING EXPOSURE TO GASEOUS POLLUTION AND AIRBORNE PARTICULATES

Pollutants from industrial gases, auto emissions, and heating sources are readily absorbed into paper and media and may form compounds detrimental to their stability. Dust, soot, and soil are difficult to remove safely from delicate, porous paper surfaces. Sources of indoor air pollution, such as ozone from copying machines and fumes from new construction materials, paint, new carpets, janitorial supplies, and wooden cabinets, can also degrade paper and media. One way to protect paper is to fully enclose each object in housing made with appropriate materials. Frames must be glazed and well sealed. Documents and unframed artwork should be protected by storage in folders within containers made of permanent durable material.

WHEN DISASTER STRIKES

Most natural or man-made disasters, such as floods or fire, involve water. Even a small amount of water from a leaky roof or pipe can do significant damage to a paper collection. When such a disaster occurs, contact a paper conservator, regional agency, or cultural institution for assistance. Immediate response within the first 48 hours is crucial to the successful salvage of materials and the prevention of mold growth.

WHEN TO CALL A CONSERVATOR

Some conditions require immediate attention. Wet or moldy materials or those with actively flaking media have high priority. If you notice pressure sensitive tapes and labels, brittle matboard, or changes in condition such as tears, detached hinges, or disfiguring stains, contact a conservator trained to address the special needs of works of art and artifacts on paper. Visit AIC’s Find a conservator at www.conservation-us.org to find a qualified conservator in your area.

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HOW TO PROTECT YOUR FURNITURE

Many owners of old furniture may only start to think about its condition when something they own is damaged. However, routine maintenance can prevent damage from occurring, enhance the furniture’s monetary value, and prolong its useful life. In order to take proper care of furniture, it is important to understand that it is composed of a variety of materials, including metal, bone, plastic, shell, leather, and fabric, as well as paints and natural and synthetic resins. All these materials must be taken into account to care for and maintain furniture properly.

STORAGE AND DISPLAY

The environment can have a profound effect on the preservation of furniture. Light, particularly visible and ultraviolet (UV) light, is very damaging to organic materials such as wood, and damage from light is cumulative and irreversible. Clear finishes often turn yellow or opaque in response to light, and the color or cellular structure of the wood itself can also change. The resulting damaged finishes and bleached wood cannot be restored to their original color without stripping and refinishing, a practice not recommended as loss of the “patina,” or evidence of use, can negatively affect the furniture’s monetary value.

To limit the effects of light, move all furniture out of direct sunlight, and utilize blinds or curtains to block the light’s intensity. UV light, which is particularly damaging to wood and fabrics, can be screened out by applying a UV-filtering film to windows.

Furniture can also be affected by the amount of moisture in the air. Wood and other organic materials respond to changes in relative humidity (RH) by expanding or contracting as they try to maintain equilibrium with the moisture in the environment. Ideally, RH levels should be maintained within a 40 and 60 percent range. If the RH is too high (above 70 percent), wood and other materials expand. If they are constrained in any way, they may split upon shrinking when the RH drops to a lower level. Changes in RH can even cause a coating to detach. A prolonged high humidity environment will also promote the possibility of mold growth and insect infestation. To prevent damage, place furniture in areas of minimum temperature and RH extremes. Avoid storing furniture in attics and basements or placing pieces near fireplaces and heating vents.

Monitoring temperature and RH in an environment can be done with thermometers and hygrometers purchased at electronic or hardware stores and the RH can be modified to stay within acceptable ranges through the use of humidifiers and dehumidifiers.

INSECT ACTIVITY

A common furniture pest is the powderpost beetle, less than a quarter-inch long, which lays its eggs in small crevices. The insect larvae burrow into the wood, creating networks of tunnels as they eat their way along the grain. As they mature to adults, they bore out of the wood leaving an “exit” or “flight” hole and fly off to lay their eggs, completing the cycle.

Ifflight holes are observed in furniture, it is important to determine if the infestation is active. Active flight holes are light-colored and contain a fine, sawdust-like material called frass. Any material resembling sawdust that appears on the floor underneath a piece of furniture could be a sign of a possible infestation. Frass from an infestation that is no longer active can be dislodged if furniture is moved or jostled, giving an impression of insect activity, but should frass continue to appear after being swept away, it is likely that the infestation is active. If furniture or other wooden objects appear to have active infestation, they should be isolated immediately by placing them in a large sealed plastic bag. As fumigation may be the next step—and there are a variety of methods available to accomplish this—a conservator, or exterminator familiar with conservation issues, should be called immediately.

CLEANING AND HANDLING

It was once thought that furniture needed to be “fed” with various mixtures of oils and other materials to keep it from drying out. However, a better approach would be to keep furniture in a stable environment. Furniture oils are not recommended for maintenance as many of them contain linseed oil or other drying oils, and when used repeatedly will create a gummy, insoluble surface coating that darkens and obscures the grain of the wood. Other furniture polishes contain non-drying oils such as lemon oil, but attract and entrap dirt and grime. Silicone polishes are also not recommended as they leave a film that is difficult to remove and can interfere with future finish treatments.
The best maintenance for clear-varnished furniture is a coating of good paste wax. Wax is a very stable material that does not change chemically over time and provides protection from moisture and airborne pollutants. Good quality paste wax is available in most hardware stores. A thin coat applied following the directions on the can is all that is needed, no more than once a year. It may not be appropriate to wax furniture that is gilded, painted or lacquered, or furniture that has unstable veneers or flaking finish. Consult a conservator if any question about the appropriateness of waxing arises.

Once a protective coat of wax has been applied, dry dusting with a soft cloth is recommended for routine cleaning. Dust and dirt are harmful to finished surfaces and should be regularly removed as they can scratch or otherwise damage polished surfaces. A soft cotton cloth or artist’s brush is best for dusting. Feather dusters are not recommended for dusting as the feathers tend to get caught in cracks and crevices and can cause detachment of fragile veneers and gilding. A clean cloth slightly dampened in water may help to remove more stubborn dirt. When dusting, be cautious in areas with loose elements such as veneers, moldings, and metal mounts. Should an element become detached, place it in a plastic bag labeled with its original location on the piece until a conservator can reattach it.

If brass hardware on furniture is tarnishing, the owner may want to polish it. In most cases furniture hardware was intended to be brightly polished. There are many brass polishes on the market. Those that contain ammonia can cause long-term corrosion problems, so it is best to choose one of the polishes that has a mild abrasive embedded in cotton wadding. Ideally, hardware should be removed for cleaning so that the polish cannot come into contact with the surrounding wood. If that is not possible or practical, polish the hardware carefully, confining it to the metal only. A good option to a regular regimen of hardware polishing is to have the hardware coated with clear lacquer.

Before moving a piece of furniture, examine it for loose or damaged joinery. If it is safe to move, remove elements such as shelves, doors, and drawers. If doors cannot be removed, secure them by locking or wrapping the case with soft cotton straps. Tables should always be lifted by the apron or legs rather than by the top, which could possibly detach. Chairs should be lifted by the seat rails and not by the arms or crest rail. When moving a large piece, be sure to lift it and not drag it across the floor, as excessive lateral pressure on legs and feet can cause them to shear off. When transporting furniture in a vehicle, place the object on its back or top, not on the legs. If the piece has a marble top, carefully lift it off and transport or store it vertically, as one would a sheet of glass.

Common Concerns

Stripping and refinishing furniture is no longer standard practice. An early finish is as important to historic furniture as the legs or any other element. The finish coating offers important data to researchers and is part of the history of the object and once it is removed, it cannot be recovered. It is also desirable to be able to observe on a piece of furniture patterns of wear that indicate the history of use, which stripping and refinishing can obliterate. The appearance of old finishes can often be enhanced without completely removing them by using cleaning materials tailored for specific conditions. The removal and replacement of a surface finish is considered a last ditch effort after other conservation methods have failed. An aged finish, with a patina that only time can produce, can greatly add to the beauty of an object. The primary goal of any treatment should be to maintain the patina of age.

When To Consult A Conservator

The majority of historic furniture is in private hands. Proper care and maintenance is the only way to ensure its preservation for future generations to appreciate. Although some objects may eventually become part of a museum collection, it is nevertheless incumbent on the current owner to provide proper care. Many aspects of furniture care are straightforward and can be carried out by an educated owner. Problems that are beyond an owner’s capabilities should be referred to a conservator. AIC’s Find a Conservator at www.conservation-us.org can direct you to a qualified conservator in your area.

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HOW TO PROTECT YOUR METAL OBJECTS

Tools, jewelry, toys, sculpture, tableware, furniture, kitchenware, and almost any other item can be made from metal. Metals—gold, silver, copper alloy, pewter, and iron to name just a few—are produced from ores that are found in nature and are processed, or smelted, from a stable mineral state to a less stable metallic state. Almost every metal material you will encounter will be an alloy—a mixture of more than one metal. Metals are mixed to achieve certain qualities in the finished alloy like color, strength, or corrosion resistance. Metals are also often layered together, as in the case of silver plated on a base metal substrate or tin plated on an iron substrate.

The primary means by which metals deteriorate is through corrosion. Most metals corrode on contact with water, acids, bases, salts, oils, aggressive metal polishes, and other chemicals. They will also corrode when exposed to gaseous materials. Other sources of deterioration for metal objects include breakage, dents, and scratches from accidents or mishandling.

Noble metals like gold and silver corrode less readily than baser metals like iron, tin, and lead. Gold, for example, truly does not corrode. Silver can suffer from sulfide-related tarnish and can corrode under very aggressive conditions such as in archeological contexts, but is fairly stable. Less noble metals, such as copper alloys, corrode more readily; base metals such as iron corrode very easily. Because metal is electrically active, galvanic corrosion can occur when two metals are in direct contact with each other. The base metal will contribute electrons to the more noble metal creating an electric circuit. This causes preservation of the more noble metal and corrosion of the more base metal.

CLEANING AND HANDLING

One of the sources of damage to metal is improper handling and carelessness. Oils and acids that are continuously secreted through human skin are deposited on metal surfaces during handling, where they cause corrosion and pitting. As experienced gun collectors and jewelers can attest, the actual pattern of a person’s fingerprint can corrode into a metal surface. Metal objects should always be handled with clean, white cotton gloves, or vinyl gloves with a pair of cotton gloves over them to further prevent sweat from passing through to the object. If items are handled with bare skin or are used, as in the case of tableware, they should be carefully cleaned before storage or display to remove these deposits and prevent corrosion from skin acids and oils. White gloves are recommended because it is easy to determine when they become soiled and need to be washed.

Careless handling can also lead to denting, bending, or breaking metal artifacts. It is best not to overestimate the strength and resiliency of metal pieces; they are often weaker or more brittle than one anticipates. Extra caution in handling can prevent serious damages that can be expensive to repair.

Metal objects should be kept free of dust, debris, and oily residues. In general, it is not a good idea to routinely polish or aggressively clean metal pieces. Each time a piece is polished or cleaned, a thin layer of the surface is ground off by the cleaning tools, the abrasives in the polish, or is dissolved away by strong chemicals in cleaning solutions. Repeated polishing or cleaning with chemicals such as dipping solutions will gradually eat away plating, surface decoration, engraving, maker’s marks, and monograms. Eventually, holes will form in the body of the metal object. As an example, many people will use a wire brush on an electric drill to clean away rust on old iron objects like tools. This is very aggressive and may remove important surface features like the maker’s stamps or historically important signs of use. It is best to use the most mild and non-abrasive methods for cleaning metals.

THE ENVIRONMENT

A controlled environment is one of the most important elements in the preservation of your metal objects. Excessive humidity is a leading contributor to the corrosion of metal. It is important to keep the relative humidity below 55 percent in areas where you keep important metal artifacts. You can use dehumidifiers and air conditioning to limit the amount of moisture in the air. Avoid storing your items in the basement, where the relative humidity is often far too high. Metal artifacts from an archeological context such as bronze and iron should ideally be kept at an even lower relative humidity, below 40 percent.

Another aspect of the environment that is critical to the preservation of metals is air pollution. Fine dust and debris in the air can accumulate on metal surfaces, where it attracts...
moisture and encourages corrosion. Keeping metal objects dust-free or carefully covered with dust covers can prevent this type of corrosion.

Gasses in the air also attack metals. Gasses from car exhaust, rubber products, and cigarette smoke cause silver and copper alloys to discolor and corrode. The characteristic tarnish on silver is black silver sulfide. Acidic gases from wooden cabinets and cases can also cause metal corrosion. Vapors produced by plywood and other products that off-gas formaldehyde cause lead alloys and other metals to corrode, forming wispy white crystals often confused with mold growth. Keeping metal objects in a clean, dry, safe environment can prevent deterioration from environmental sources.

STORAGE AND DISPLAY

Metals, in general, should be stored with inert storage materials. For example, metallic cabinets and shelving should be used rather than wood cabinets and shelving as many woods and wood products, like plywood, emit acids and other gasses that cause metals to corrode. Acidic newsprint and cardboard boxes also should be avoided. Acid-free, lignin-free wrapping paper and boxes are better. Clean, soft cotton cloth can also be used.

Silver, for example, can be stored in “silver cloth” available through jewelers’ and fabric stores. Silver cloth will drastically slow the rate at which your silver will tarnish by preventing sulfur gases in the air from reaching the surface of your silver piece. Silver cloth, however, should be changed every few years to remain effective. As the compounds in the cloth complex with gases, they become used up and may eventually be holding the oversaturated pollutants in close contact with your silver. Washing and re-using silver cloth is not effective so it is advised to buy new.

Storage containers, called housings, should also provide adequate physical protection for your objects. They should be suitably padded to prevent direct contact with other metal surfaces that can lead to corrosion. Padding also prevents denting, scratches, and other physical damage. For example, silver cloth is soft and will not scratch. It is thick, like flannel, and provides padding that will prevent small dents and dings.

Metals objects, even large ones like farm implements or automobiles, should always be covered to protect from dust build up. Clean cotton sheeting can be used to make removable dust covers.

WHEN DISASTER STRIKES

For metal objects, the most serious threat from a disaster is water damage. Metal objects that have become wet during an emergency should be rinsed with clean distilled or deionized water as soon as it is practically possible. If distilled or deionized water is not available, tap water will suffice until the object can be examined by a conservator. The rinsed objects should then be dried as quickly as possible to prevent corrosion. Clean cotton or paper towels can be used. If conditions are such that dry towels are not available, objects can be placed in the warm sun to dry. Be very careful not to scratch objects by wiping off grit or soil or by using towels that are dirty or gritty. Metal objects should not be left wet; they will quickly corrode. Other questions about preserving your metal objects after a disaster can be answered by a local conservator.

WHEN TO CONSULT A CONSERVATOR

If your object requires special intervention like repair, re-plating, or replacement of missing parts, you should contact an objects conservator. They will give you advice about the safest means by which to conserve and restore your special items. Visit AIC’s Find a Conservator at www.conservation-us.org to find a qualified conservator in your area.

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A photograph can be one of many processes in which light-sensitive media are employed to create a visible image. The prevalence of photographs allows us to forget that they are potentially fragile objects that can be easily damaged by careless handling, improper storage, and exposure to environmental influences such as light, humidity, and temperature.

In caring for a photographic collection, it is important to know that various components comprise the structure of a photograph. The interaction of these components, with each other and with their environment, has a lasting effect on the longevity of the image. Most photographs consist of a final image material, a binder layer, and a primary support. The final image material—commonly silver, platinum, organic dyes, or pigments—creates the image we see. The binder layer is a transparent substance such as albumen, colloidion, or gelatin in which the final image layer is suspended. The binder and final image material are applied to a primary support, usually paper, glass, metal, or plastic. Although many photographs have this three-part structure, individual images may have additional components. For instance, color, coatings, original frames, and cases need to be considered as part of the photographic object.

MAINTAINING A SUITABLE ENVIRONMENT
Photographic materials benefit from a cool, dry, well-ventilated storage environment. High temperature and relative humidity increase deterioration and promote the growth of mold and mildew, which could mar surfaces and break down binder layers. Avoid storing photographs in the attic, the basement, or along the outside walls of a building where environmental conditions are more prone to extremes and fluctuations and where condensation may occur. In some storage situations, seasonal adjustments such as dehumidifiers or fans may be necessary to improve problematic environmental conditions.

The optimal storage conditions for most photographs are a temperature of 68°F and relative humidity in the range of 30–40 percent. Film-based negatives and contemporary color photographs benefit from storage in cooler environments of 30–40°F and 30–40 percent relative humidity.

CHOOSING STORAGE ENCLOSURES
Keep photographic materials in enclosures that protect them from dust and light and provide physical support during use. Chemically stable plastic or paper enclosures free of sulfur, acids, and peroxides are recommended. Plastic sleeves should be constructed of uncoated polyester, polypropylene, or polyethylene. They should not be frosted. Paper enclosures should have passed the Photographic Activity Test (PAT), a test designed to determine the safety of an enclosure in contact with a silver photographic image. If PAT test results are not available, choose paper enclosures that are lignin-free, 100 percent rag or alpha-cellulose fibers, and have a white or off-white color. Film-based negatives, which can produce acidic gases as they age, should be stored separately from other photographic materials. Store casecd objects, such as daguerreotypes and ambrotypes, in their original cases or frames with the addition of custom-made, four-flap paper enclosures to reduce wear and tear on fragile cases. Place individually housed prints, negatives, and cased objects in acid-free, durable boxes that will afford further protection.

The storage of photographs in albums serves the dual purpose of organizing groups of images while protecting them from physical and environmental damage. Albums can be wonderful sources of historic and genealogical information. Preserve them intact when possible and store them in custom-fitted archival boxes. Magnetic or self-adhesive albums can damage photographs and should not be used.

DISPLAYING PHOTOGRAPHS
Photographs should be protected from extended exposure to intense light sources. Limit exhibition times, control light exposure, and monitor the condition of the photographs carefully. Prolonged or permanent display of photographs is not recommended. Use unbuffered ragboard mats, and frame photographs with archivally sound materials. Use ultraviolet-filtering plexiglass to help protect the photographs during light exposure. Reproduce vulnerable or unique images and display the duplicate image; in this way, the original photograph can be properly stored and preserved.

HOUSEKEEPING GUIDELINES
An overlooked area of collection maintenance is keeping the areas where photographs are handled or stored clean and pest-free. Paper fibers, albumen, and gelatin binders are just some of the components in photographic materials that provide an attractive food source for insects and rodents. It is vital that collection areas be free of debris that might encourage pests. Food and beverages should not be allowed. Apart from the potential for attracting pests, accidental spills can irreversibly damage most photographic objects.
HANDLING PROCEDURES

Most damage to photographs results from poor handling. A well-organized and properly housed collection promotes respect for the photographs and appropriate care in handling. When images can be located quickly, there is less possibility of physical damage. Establish handling procedures and adhere to them whenever photographs are being used. View photographs in a clean, uncluttered area, and handle them with clean hands. Wear clean white cotton gloves to lessen the possibility of leaving fingerprints and soiling the materials; however, be aware that gloves may reduce the manual dexterity of the user. Support photographs carefully and hold them with both hands to avoid damage. Keep photographs covered when they are not being viewed immediately. If it is necessary to mark a photograph, write lightly with a soft lead pencil on the reverse of the image. Do not use ink pens.

DISASTER PREPAREDNESS

Disaster preparedness begins by evaluating the storage location and the potential for damage in the event of a fire, flood, or other emergency. It is important to create a disaster preparedness plan that addresses the specific needs of the collection before a disaster occurs.

The location and manner in which photographs are housed can be the first line of defense. Identify photographic materials that are at higher risk of damage or loss. Remove all potentially damaging materials such as paper clips and poor-quality enclosures. Store negatives and prints in separate locations to increase the probability of an image surviving a catastrophe. If a disaster occurs, protect the collection from damage by covering it with plastic sheeting and/or removing it from the affected area. If using plastic, make sure not to trap in moisture as this could lead to mold growth. Evaluate the situation and document the damage that has occurred. Contact a conservator as soon as possible for assistance and advice on the recovery and repair of damaged materials.

COMMON CONCERNS AND SOLUTIONS

The following problems are commonly encountered in photographic collections:

Broken, torn, or cracked photographs: If the primary support of a photograph sustains serious damage, place it carefully in a polyester sleeve with an archival board support. If the photograph has a flaking binder layer or friable surface components, such as the pastel coloring often seen on crayon enlargements, place it in a shallow box, not a polyester sleeve. Do not use pressure-sensitive adhesive tapes to repair torn photographs.

Soiled photographs or negatives: Do not clean photographs with erasers. Brush soiled photographs carefully with a clean, soft brush. Proceed from the center of the photograph outward toward the edges. Do not attempt to clean photographs with water- or solvent-based cleaners, such as window cleaner or film cleaner. Improper cleaning of photographic materials can cause serious and often irreversible damage, such as permanent staining, abrasion, alteration, or loss of binder and image.

Photographs or negatives adhered to enclosures: High-humidity environments or direct exposure to liquids can cause photographs to adhere to frame glass or enclosure materials. This is a very difficult problem to resolve, and great care must be taken to reduce the possibility of further damage. If a photograph becomes attached to adjacent materials, consult a photographic materials conservator before attempting to remove the adhered materials.

Deteriorated negatives: Chemical instability is a major factor in the deterioration of early film-based materials. If film-based negatives are brittle, discolored, sticky, or appear wavy and full of air bubbles, separate the negatives from the rest of the collection and consult a photographic materials conservator.

Broken glass negatives or ambrotypes: Place broken glass carefully in archival paper enclosures. Use a separate, clearly marked enclosure for each piece to reduce the possibility of scratching or further damage. For long-term storage, construct a custom sink mat that holds the pieces of broken glass, separated by mat-board shims, in one enclosure.

WHEN TO CONSULT A CONSERVATOR

If your photograph requires special attention or you are unsure about how to protect it, you should contact a conservator. AIC’s Find a Conservator at www.conservation-us.org can direct you to a qualified conservator in your area.

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Throughout human history, textiles have played a rich part in the lives and traditions of people of all cultures. They have been constructed using a wide variety of materials and techniques—from natural fibers such as cotton, silk, flax, and wool to regenerated or manufactured fibers such as rayon, nylon, and polyester.

Textiles can be simple in structure and composition or can be part of complex composite objects that incorporate other materials like paper, leather, glass, metals, paint, stone, horn, bone, shell and feathers.

Contemporary household furnishings, clothing, many fashion accessories, and even fragmented archaeological finds are all textiles. Textiles, such as quilts, tapestries, embroideries, flags, and christening gowns are often treasured for their artistic, technical, cultural, and sentimental value.

Most textiles, at some time in their history, have served as functional objects. This history of use, along with environmental and handling factors, can affect a textile’s condition, resulting in the need for special care to ensure its long-term preservation. Making careful and informed decisions regarding the handling, display, and storage of a textile can make the difference between a short life span and a textile’s preservation for future generations.

ENVIRONMENT

The deterioration of textiles is often due to a combination of physical, biological, and/or chemical factors working together to cause damage. Inappropriate lighting; improper temperature and relative humidity levels; excessive dust, dirt, and other pollutants; insects; mold and mildew; and incorrect handling all contribute to damage.

LIGHT

Both natural and artificial light can fade color and contribute to the degradation and permanent damage of many textile fibers. The rate at which damage occurs is determined by the level of illumination and the duration of exposure. And, unfortunately, light damage is cumulative and irreversible. If long-term preservation is a concern, protecting textiles from light exposure is key. To this end, several simple and practical steps can be taken: keep draperies drawn to protect textiles from strong, direct light; use ultraviolet light filtering glazing when framing textiles for display; and install ultraviolet light filtering films on windows and over other light sources. Keep in mind, however, that all types of light damage textiles. The risk of light damage can be further minimized by periodically rotating your textiles on and off display.

TEMPERATURE AND RELATIVE HUMIDITY

High temperatures speed up the rate of many chemical reactions, and as a result, speed up the rate at which damage can occur in fibers, dyes, and other component materials of textiles. For this reason, textiles are best stored and displayed as far away from heat sources (fireplaces, spotlights, windows, etc.) as possible. Areas inclined to high temperatures (above 80°F) and those subject to sudden or great temperature changes, such as unfinished attics and basements, are not appropriate for the safe storage of textile artifacts.

Relative humidity is a measure of the amount of moisture in the air. Because many organic materials contain moisture, fluctuations in temperature and relative humidity can cause these materials to expand and contract as they take in or lose moisture. A painted silk banner, for example, can be adversely affected when the pigment and binder in the painted design do not expand and contract at the same rate as the fibers in the silk fabric. As a result, the paint layer will tend to crack and flake off. Other potential problems associated with high relative humidity are mold and mildew, the corrosion of metals, and the bleeding of some dyes. Relative humidity is best maintained at a constant level between 35 and 65 percent.

POLLUTION AND AIRBORNE SOILING

Smog, car exhaust, and ozone are common pollutants that can cause physical and chemical damage. Textiles are particularly susceptible to abrasion and physical damage caused by dust and other gritty particulate surface soiling. Eliminating exposure to these contaminants is an important aspect of preventive conservation care. The use of particulate air filters and protective display and storage enclosures is recommended when planning for the long-term preservation of textiles.

DISPLAY AND STORAGE

Textiles are best preserved when displayed and stored in clean, well-ventilated areas that are routinely and adequately maintained. Controlling dust, clutter, and other accumulations of extraneous material will greatly reduce the possibility of damage caused by insects, rodents, and microorganisms such as molds and fungi. Inspect your textiles often, ideally at six-month intervals, to identify problems early on. Indications of active deterioration are an increase in textile discoloration, tarnishing of metal components, and the presence of a
sweet or musty odor. Signs of insect infestation include small, irregularly shaped holes, and/or the presence of insect casings and excrement. Controlled vacuuming can be an effective means of reducing dust and other particulate soiling, though not all textiles, can be safely vacuumed. There are various methods of vacuuming depending upon a textile’s condition, component materials, and method of construction. Specially-modified equipment allowing for low suction is often necessary for vacuuming to be accomplished safely. For large or sturdy textiles, vacuuming with an up and down motion (lifting, not dragging the vacuum nozzle) over a protective sheet of flexible plastic screening may be recommended. For fragile three-dimensional textile artifacts, dusting lightly with a soft brush into a specially-modified low-suction vacuum nozzle may be preferable. Contact a professional conservator to discuss appropriate techniques before you begin.

HANDLING

Proper handling is important for the long-term preservation of textiles. Textiles are frequently more fragile than they first appear. Before attempting to handle or move a textile, familiarize yourself with its weak areas. Physical damage can occur suddenly as a result of even careful handling. Support a textile in a manner that distributes its weight evenly. A delicate silk embroidery may be supported by sliding a piece of paper or cardboard underneath, while a heavier textile such as a carpet or tapestry is best rolled on a large tube or carried in a fabric sling.

Clean hands are important when handling textiles, as human skin contains oils and perspiration. Refrain from using skin creams as they may be readily absorbed by textile fibers and later contribute to staining. Wash your hands frequently or wear inexpensive white cotton gloves that are available through photographic and conservation suppliers. Remove jewelry or anything that may snag and be careful not to rub or drag your hands against the textile. Be aware that yarns and fibers can be easily pulled, frayed, and weakened depending upon the textile’s condition, its component materials and method of construction.

HOUSING: FRAMING, DISPLAY AND STORAGE

The materials used in frames and storage enclosures must be carefully selected to ensure a protective and stable environment. Most wood, packing cardboards, and some plastics are chemically unstable. Use archivally-stable materials such as barrier films, acid-free unbuffered matboards and paperboards, rolling tubes, and storage boxes that are available through conservation supply catalogues and at some art supply stores instead. Contact your local museum for sources near you.

DISASTERS

The two most common forms of disaster damage are those caused by water and fire. Prompt attention to textiles following a disaster can greatly reduce the likelihood that they will suffer permanent damage.

In the case of wet artifacts, remember that most textiles become weaker when wet and will need support for safe handling and transport. If handling is possible, separate colored textiles from others to reduce the risk of dye transfer. Rinse any silt or debris off with clean, cool water, then blot the textiles carefully with absorbent toweling to remove as much moisture as possible. Lay the textiles flat to dry in a room with good air circulation. Cover them with clean, thin, cotton sheets to absorb impurities and provide protection during drying. If the water-damaged textiles are already dry, deposited soiling may often be removed with a soft brush and special low-suction vacuum, as previously described.

When there are too many water damaged textiles to dry immediately, it is advisable to contact a conservator or local museum for advice. It may be possible to freeze the wet textiles to prevent mold growth and arrest bleeding dyes. Arrangements can then be made to examine and dry the textiles under controlled conditions.

Fire, soot, and smoke damage pose special problems for textiles. It is always advisable to contact a conservator before handling a soot-damaged artifact. Handling can irreversibly drive sooty surface soiling deep into the fibers of a textile. The use of ozone to remove smoky and/or mold and mildew odors from a textile is not recommended as ozone will accelerate aging and degradation in many textile artifacts.

WHEN TO CONSULT A CONSERVATOR

Before attempting to repair, clean, or mount a textile artifact, contact a professional textile conservator for advice. The conservator will examine your textile, evaluate its composition and method of manufacture, document its condition, and make note of inherent problems and areas of damage. A treatment option will then be proposed, taking into account your concerns and any relevant historical information.

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4.1 Storage and Handling for Books and Artifacts on Paper

NEDCC Staff
Northeast Document Conservation Center

INTRODUCTION
By itself, any single paper item or book would seem easy to store and simple to preserve. However, most collections present challenges based simply on their size and the number of items they contain. When combined with considerations about storage space, storage methods, and shelving, the challenges of storing one item among many become complex.

Storage and handling methods have a direct impact on the useful life of collections and the accessibility of information. Damage to collections can be avoided by preventing overcrowded, careless, or haphazard storage conditions. Chemically unstable and improperly fitting shelving and storage enclosures accelerate the deterioration of materials they are intended to protect. Normal use causes wear, but inexpert and rough handling can quickly lead to extensive damage to collections requiring expensive repair or replacement. The longevity of collections can be extended significantly by putting into practice the guidelines discussed here.

BOUND VOLUMES
Hardcover books appear to be the most robust of the paper-based materials because of their hard covers and complex construction. Careful viewing of any book collection, however, will reveal that those very properties work against the items when improperly stored. To prevent damage to books while sitting on the shelf and while being used, a few relatively simple steps should be taken: adequate air circulation, proper shelving practices, housing books in custom protective enclosures where needed, and encouraging safe handling practices for staff and users.

To prevent damp or stagnant pockets of air (that can lead to mold growth) good air circulation should be maintained in storage areas. To help promote circulation:

- do not block or deflect heating or cooling vents;
- store books at least three inches away from exterior walls, especially when in below-grade storage areas; and
- periodically open closed cabinets, especially those housed against exterior walls or those that are fireproof.

Shelving Bound Volumes
The first step in safely storing bound volumes is to ensure adequate shelving. Shelving that is too shallow allows books to extend beyond the edges of the shelf, which exposes them to book trucks, backpacks, vacuums, and feet. If the shelving is not sufficiently strong, shelves can bow and the entire unit can become unstable. Finally, some shelving units contain by-products that contribute to the deterioration of collections or have rough surfaces that can be abrasive. For information on selecting quality shelving for paper-based collections, consult NEDCC leaflet 4.2 Storage Furniture: A Brief Review of Current Options.

To avoid damaging bindings, books need to be shelved upright and supported. Non-damaging bookends with smooth surfaces and broad edges prevent bindings from being abraded and leaves from being torn or creased. Wire bookends that are built into shelving are less desirable as they are frequently an incorrect size and often damage short and tall books.

In a relatively static collection, it may be possible to arrange volumes so that shelves are full, preventing books from leaning. In actively growing and changing collections—in addition to providing support—it is also important to provide adequate space for expansion of the collection. Books should not be shelved so tightly that they are damaged when they are removed from the shelf.
If books are too tall to fit appropriately on the shelf, they may be moved or shelves rearranged so that the books fit on the shelves standing upright. If moving or rearranging is not possible, store volumes with the spine down (storing a book with the spine up may cause the text to pull out of the binding due to its weight). Call numbers can be moved from the spine to the upper right corner of the cover for oversize volumes (height is determined by an individual institution’s shelf height) to allow for identification when shelved in this way. As much as can be managed, shelf books by size since small volumes cannot adequately support larger ones.

House very large or heavy volumes lying flat, because upright storage can result in heavy books pulling away from their bindings. When books are stored horizontally, stacks should only be 2-3 volumes high to make retrieval less intrusive. As for upright books, shelves should be wide enough to support oversize books completely so that they do not protrude into the aisles. Bindings with special value should be boxed to prevent abrasion to the bindings when stored flat. Take care to ensure that call number flags or titles are visible so that the books can be identified on the shelf.

**Custom Protective Enclosures**

Custom protective enclosures provide books with structural support and protection from dust, light, and mechanical damage. Detailed information on boxes can be found in NEDCC’s forthcoming leaflet 4.5 *Custom Protective Enclosures*. For the best level of protection, enclosures should be constructed of permanent, durable materials and custom made to fit the book’s dimensions exactly. Enclosures come in many varieties and each has its strengths: drop-spine boxes, phased boxes, wrappers, slipcases, book shoes, dust jackets, and pamphlet binders. Candidates for protective enclosures include:

- volumes with fragile bindings of special value that should be retained in their present condition;
- damaged books that have low value or are rarely used and do not warrant treatment or repair of the binding;
- thin, small, fragile, limp, or oddly-shaped volumes; and
- parchment bindings.

Drop-spine boxes provide rigid support and restraint, especially for parchment bindings, which can easily warp in fluctuating environments. Phase boxes can provide support and protection to larger books. Both drop-spine boxes and phase boxes are available from a wide variety of vendors and library binders. Wrappers provide support and protection for small books and can easily be constructed in-house with minimal equipment. Slipcases are not recommended because they abrade the surfaces of bindings when the book is removed or replaced (note: many volumes were issued with slipcases and these should be kept together). A book shoe may be appropriate for volumes that require structural support but cannot be placed in a box (for example, books on display in an historic house that are part of a permanent exhibit). For books that have red rot or otherwise could affect other books stored around them, polyester dust jackets provide simple and inexpensive protection. Envelopes are sometimes used for the storage of books but do not provide the support required by damaged volumes and should ideally be replaced with one of the previously mentioned enclosures. Envelopes can also damage materials when physically removing or replacing items through abrasion or tearing. Rubber bands and string are damaging and are not appropriate means of holding books together. Instead, volumes can be boxed, wrapped in paper, or tied with a flat and undyed cotton, linen, or polyester tape. Tape should be tied at the top or fore-edge of the textblock to prevent bows and ties from damaging adjacent volumes.

**Handling Bound Volumes**

Poor handling procedures can cause significant damage to books, resulting in restricted, delayed, or discontinued use, or requiring expensive treatments before the volume can be used again. Pulling a volume off the shelf by the headcap can damage the spine and joints of the book.
Incorrect method of removing a book from the shelf

Do not pull on the headcap of a book when removing it from the shelf. Instead, there are two alternatives. The first is to put a finger on top of the pages (rather than the headcap) and gently tilt the book out. The other is to push in the books on either side of the desired book. Then pull out the desired book by gently grasping it on both sides with the thumb and fingers (or pull the book out by using the textblock as leverage, not the headcap). Once removed, the remaining books on the shelf and the bookends can be shifted so all books are supported. When the book is replaced, the bookend should be loosened, the books moved on the shelf to make a space, and the book reinserted in the space. The bookend should then be repositioned.

For special collection materials, placeholder blocks can be used to reduce shifting that can lead to damage. Placeholder blocks can be made from Ethafoam, cloth covered wood, or foam core and should be labeled and stored throughout the storage area for easy access.

When oversize books that are stored flat are removed, transfer the upper volumes to a permanently dedicated and labeled empty shelf or book truck. Lift oversize volumes with both hands, and once the desired volume is reached, return removed volumes to the shelf. Putting the book back on the shelf should be done in the same way. For very large or heavy volumes, two people may be necessary to reduce the risk of injury.

Using book trucks to move volumes is strongly recommended. When using book trucks, use bookends as if the books were on the shelf, or stack volumes according to size so they do not extend beyond the edges of the truck. Keep the center of gravity of the loaded truck low to help stabilize it and use extra caution when wheeling trucks into and out of elevators or over thresholds to prevent items falling off the cart.

When special collections volumes are used in a reading room, cradles, snakes, and page-turners should be made available to researchers to support stiff and fragile bindings. A helpful video produced by University of Glasgow Archive Services and Special Collections department entitled “Handling Bound Volumes” [http://www.youtube.com/watch?v=UH1x6pZ57Pc](http://www.youtube.com/watch?v=UH1x6pZ57Pc) and for general handling of special collections materials at “Handling Harvard’s Special Collections” [http://www.youtube.com/watch?v=UOV0SOQ868](http://www.youtube.com/watch?v=UOV0SOQ868).

**NOTE:** Page-turners can be anything thin to slip in between pages, including microspatulas, thin Teflon folders, or simple items made out of stiff paper.

Staff training for safe handling practices is important to ensure that materials will be preserved during processing and also when being used by the public. Users should be instructed in the careful handling of bound volumes and in the use of the cradles and snakes in an initial orientation, as well as when formats change and require different handling practices.

**Photocopying or Scanning Bound Volumes**

Books are often unnecessarily damaged during copying. Photocopy machines and flatbed scanners encourage pressing the binding flat in order to get a good image. Overhead scanners are better for public use because they allow a book page to be copied with the book open less than 180 degrees.

Copying or scanning of books from special collections should be done by staff members (if the materials are particularly fragile). If materials are stable and an overhead scanner is available, researchers can be trained to make their own copies. Digital cameras can also be used with the proper policies in place. For guidance in using digital cameras in special collections and archives, see “Capture and Release”: Digital Cameras in the Reading Room at [http://www.oclc.org/research/publications/library/2010/2010-05.pdf](http://www.oclc.org/research/publications/library/2010/2010-05.pdf).

**Marking Special Collections Materials**

When marking special collections materials, the best practice is to use non-damaging methods. Interior markings should only be made in pencil. Painting call numbers on spines or attaching labels with pressure-sensitive tape can be permanently disfiguring or damaging, and may discolor the binding. Call numbers can either be typed onto text-weight, alkaline paper flags placed inside the volume, or placed on a box containing the volume. Flags should be about two inches wide and two to three inches longer than the book is high. Avoid the flags with cut out tabs that fit over the page as they can be damaging. For volumes with powdery leather bindings, a dual solution can be to construct polyester film jackets and place call number labels on the jacket, thus labeling the volume and protecting adjacent volumes from the red rot.

Attaching bar code labels to special collections materials is not recommended because the books may be damaged by the adhesives or during future removal of the label. If bar codes, RFID tags, or any other adhesive label must be used, the tag can be attached to a flag, on the box, or on a polyester film jacket as mentioned above.

[93]
If bookplates are used, they should be made of acid-free, lignin-free, buffered paper and attached with a stable, reversible adhesive, such as starch paste or methyl cellulose.

When possible, remove ephemera such as bookmarks, scraps of paper, and pressed flowers. This will prevent acidity in unstable inserts from migrating into book pages and damaging them, and reduce strain on the structure. If inserts need to be kept in place, house items in small polyester or acid-free, lignin-free, buffered sleeves in the book. If there are too many items to safely store in the book, label the pieces to record the location in the book, and store boxed in folders. Paper clips and staples should also be removed. To learn about proper removal of paper clips and staples, see NEDCC leaflet 7.8 Removal of Damaging Fasteners from Historic Documents.

For books that do not have special value, care should be taken to ensure that the label adhesive will remain effective over time. It is especially important that the adhesive does not desiccate, which causes labels to come loose or fall off, and does not ooze, which causes stickiness on the book that will attract dirt and may damage other materials that come into contact with it.

**Pamphlets**

Pamphlets are small texts not bound in hard covers, yet often stored with hardbound texts. Because of this, pamphlets sustain considerable damage unless they are stored in a protective enclosure. One of the most common enclosures is a pamphlet binder. When using binders, select those that do not require gluing the pamphlet in but those that allow the pamphlet to be sewn in, or have pockets or 4-flap enclosures built in. Binders with pre-glued hinges will obscure information and damage the paper of the cover and pages of the pamphlet over time. Modern pamphlets can be stapled in to binders if stainless steel staples are used. Historic or brittle pamphlets are best housed in binders with 4-flap wrappers or in folders in boxes.

Pamphlets can also be housed in acid-free, lignin-free, buffered folders. If pamphlets are in stable condition, contain fewer than 50 pages, and are similar in size, they can be housed spine down in groups of up to five items in one folder, with optional wrappers of buffered paper to protect from abrasion. Pamphlets that are brittle, torn, otherwise fragile, or especially thick should be foldered individually. Folders can be either housed in document storage boxes or in buffered hanging files in metal file cabinets.

Groups of pamphlets that are the same size and title can be housed together in custom boxes or wrappers. This strategy is economical and practical for pamphlets that are physically and chemically stable, and for titles that are accessed infrequently. Another affordable alternative, “shelf files” (e.g., open magazine/pamphlet boxes,) unfortunately provide little support or protection from light and dirt, and may damage pamphlets as they are accessed from these open, stiff-sided enclosures. As such, they are not recommended for paper-bound materials.

**Scrapbooks**

Many historical collections include scrapbooks which pose challenging preservation problems because they often contain a variety of components and media. They may have raised surfaces, three-dimensional decoration, or moving parts. They are frequently unique, fragile, damaged, and of significant associational value. The scraps themselves often cause the binding to bulge and be unduly stressed. Scrapbooks should not be stored on shelves with other bound materials because damage may result from the different sizes, shapes, weights, and conditions.

Scrapbooks can be individually stored in custom-fitted boxes. This is especially true for those of special historic value in their original form. Boxes of this type can be purchased economically from a variety of vendors. When measuring for custom boxes for scrapbooks, the most important thing to remember is to measure the widest width, the tallest height, and the thickest point in the binding. For more information on measuring, see NEDCC’s forthcoming leaflet 4.5 Custom Protective Enclosures, LINK.

For scrapbooks that are very damaged and do not have value to the institution as an object, pages can be numbered and put into individual folders and boxed, which will protect the contents and provide easier access.

**UNBOUND DOCUMENTS**

Manuscripts and other unbound documents are vulnerable to damage from inappropriate storage and handling practices because of the commonly brittle or fragile nature of the paper. To protect loose sheets during storage and handling, there are some basic practices to follow, including: foldering and boxing with chemically stable materials, removing corroded fasteners, storing materials by size and type, and encouraging safe handling practices for staff and users.

**Storage and Boxing**

Unbound documents should be housed in acid-free, lignin-free, buffered file folders. When the paper is stable, several sheets can be stored in one folder by creasing the bottom of the folder to accommodate the thickness of the papers. Fragile paper may require fewer sheets per folder or an individual polyester sleeve.

Documents and manuscripts should be unfolded for storage if this can be done without splitting or fracturing them. If a fragile paper resists unfolding, or if unfolding may result in damage, a preservation or conservation professional should be consulted before proceeding. Letters should be stored with their corresponding envelopes.

Ideally, every fastener on historic documents would be removed during arrangement or cataloging. If the institution has chosen to follow More Product, Less Process (Mark A. Greene and Dennis Meissner, *The American Archivist* 68, no. 2 (2005): 208-63, [http://archivists.metapress.com/content/c741823776k65863/fulltext.pdf](http://archivists.metapress.com/content/c741823776k65863/fulltext.pdf)), a discussion needs to be held with staff and
administration to stress the importance of at least removing already corroded staples, paper clips, and pins to prevent further damage. Any non-stainless steel fastener that will be stored in an uncontrolled or unstable environment should be removed as well, to prevent inevitable future corrosion. To learn about proper removal of paper clips and staples, see NEDCC leaflet 7.8 Removal of Damaging Fasteners from Historic Documents. If papers need to remain clipped together, use an acid-free, lignin-free, buffered paper or polyester (Melinex) barrier between the papers and the clip or use stainless steel paper clips or staples. Never use plastic clips as they cause considerable deformation.

For paper collections, objects of the same size and category should be stored together. Differences in size and thickness within an enclosure create a potential for physical damage, so it is not advisable to store flat sheets in the same box with books or pamphlets. For the same reason, heavy objects should be stored separately from lighter ones, as should bulky objects, which cause uneven pressure inside boxes. In addition, because acid migrates from chemically unstable paper to any other paper with which it comes into direct contact, it is important to isolate chemically unstable papers such as Diazotype architectural drawings, mimeographs, and other printing processes that require chemical processing or solvents.

Folders should be kept in chemically stable document-storage boxes. All folders inside a single box should be the same size and should fit the size of the box and not the size of the sheet. There are both flat and upright boxes that are suitable for document storage.

Flat boxes should be stacked only two to three high to facilitate access and prevent crushing of boxes. In upright storage boxes, documents and folders should be well supported to prevent slumping, which will deform the contents. Spacers made from chemically stable materials can be used to fill in empty space to support the folders. Care should also be taken not to overfill boxes as this can cause damage when items are removed or replaced.

Handling Unbound Documents
Careless or inattentive handling of documents and manuscripts can cause damage resulting in the loss of information or requiring expensive treatments to allow the items to be used again. When working with documents in folders, work on a flat table and keep items in the folder to maintain order. If papers are brittle or difficult to separate in order to turn, use a page-turner. As mentioned, page-turners can be microspatulas, thin Teflon folders, or simple items made out of stiff paper, basically, anything thin to slip in between pages. When using documents and manuscripts, try to handle only blank areas of the page. After use, pages should be stacked neatly in the folder and the folder returned to its proper place in the box. When handling oversize materials, be sure to have adequate room for handling, viewing, and unrolling.

Staff training for safe handling practices is important for ensuring that materials will be preserved during processing and also when being used by the public. Users should be instructed in the careful handling of unbound documents and works of art on paper in an initial orientation, as well as when formats change and require different handling practices.

Photocopying or Scanning Documents
Unbound documents and manuscripts can be damaged during copying or scanning. Care should be taken when handling any brittle materials to prevent tears or losses. Page-turners should be available to help lift fragile paper and the paper should not be allowed to slide under the frame of the platen. Multiple page documents should never be sent through the form feed on a copier or scanner.

Unbound Oversize Materials
Oversize materials—such as architectural drawings, blueprints, maps, large prints, and wallpaper samples—are best stored flat in the drawers of map cases or in large covered boxes of acceptable quality. These materials should be housed in acid-free, buffered folders inside the drawers. Because unbuffered folders are difficult to find, alkaline-sensitive materials, such as blueprints, should be stored in folders interleaved with unbuffered tissue or in polyester sleeves. All folders should be cut to fit the size of the drawer or box. Undersized folders may become lost in a stack and or even jammed at the back of a drawer. Ideally, only one item would be placed in each folder, although several may be stored together in a folder if they are similar in size and weight and they are interleaved with acid-free paper. There should be adequate space where oversize materials are stored so that they can be safely removed from drawers or shelves, and there should be a place to put them down once they are removed and prior to replacement in drawers or on shelves.

As a special note, Diazotypes should not be stored with other materials, especially VanDyke prints (for example), that are sensitive to sulfur or ammonia compounds.
If they are flexible and strong enough, oversize materials that are too large to fit in the drawers can sometimes be rolled for storage. Some items need to be rolled individually; others can be rolled in groups of four to six similar-size items, the exact number depending on the size and weight of the paper. Roll items on the exterior of a tube several inches longer than the largest item being rolled and at least four inches in diameter, larger diameters are preferable. If the tube is not made of low-lignin, pH-neutral materials, it should be wrapped in polyester film (Melinex). The rolled materials should be wrapped with neutral or buffered paper, Tyvek, or polyester film to protect them from abrasion, dust, and pollutants. The outer wrapper should be tied with flat linen, cotton, or polyester tape. This assembly may then be stored inside a larger tube for added protection, if desired.

**Photographs**

For information on storing photographs, please consult the NEDCC leaflet 5.6 *Storage Enclosures for Photographic Materials.*

**USE OF GLOVES TO PROTECT SPECIAL COLLECTIONS DURING HANDLING**

In many research libraries, users are required to wear white cotton gloves when handling archival and library materials in special collections. This practice has fallen out of favor because white gloves provide limited protection for collections and reduce tactile sensitivity making it difficult to handle collections carefully and ultimately increasing the chances of physical damage. Cotton gloves have many small hairs that can easily catch on brittle edges or worsen an existing tear. Cotton is also very absorbent and thus easily soiled, picking up dirt, dust, and other materials that can then be transferred to the item being handled. Photographs, film, and metals are the exception to this rule. Users should wear gloves when handling photographic materials, since these can be damaged by fingerprints. Objects made from metals that will tarnish such as regalia, silver bindings, and any bindings with metallic boss or embroidery threads should also be handled using gloves. When gloves must be worn for the protection of the user or the collections, lint-free cotton or nitrile (in case of latex allergies) gloves should be worn. See Cathleen A. Baker and Randy Silverman’s “Misperceptions about White Gloves,” in Resources for more detail on the arguments against using white cotton gloves.

**NOTE:** Instead of wearing gloves, it is recommended that users be required to wash and dry their hands carefully before using collections, and to rewash them whenever they begin to feel dirty. Hand washing is preferable to using alcohol-based hand sanitizing gels. While these products may be effective in killing germs, they do not remove dirt and leave behind lotions and oils that can be damaging to collection materials.

As stated above, users of library and archival collections should always be instructed in proper handling procedures for the collections they are consulting.

**CONCLUSION**

Knowing how storage and handling methods will impact the useful life of collections and the accessibility of information will lead to improved policies and procedure. By avoiding overcrowded, careless, or haphazard storage conditions, improperly sized shelving, and chemically unstable storage enclosures, the longevity of collections can be extended significantly. While even normal use causes wear, rough handling can cause extensive damage that requires repair or replacement. Adopting improved storage methods and handling procedures will enable large collection to be preserved with systematic care particular to the many individual items.

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**Ephemera**

Many historical collections include scrapbooks and ephemera (e.g., trade cards, valentines, patterns, paper dolls). Unbound ephemera should be grouped by size and type (photographs, printed material, manuscripts, and so on), individually enclosed to protect items from acid migration and mechanical damage, and stored in a way that will support them structurally. Some vendors of archival supplies offer standard-size storage boxes and sleeves for common ephemera such as postcards and stereo views. Others can produce custom-sized enclosures in quantity to meet special needs.
RESOURCES


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5.6 Storage Enclosures for Photographic Materials

INTRODUCTION

Paper or plastic? Folders or sleeves? Storage enclosures for photographic materials come in a variety of options, each with their own advantages, disadvantages, and precautions. When purchasing supplies for photograph collections, it’s important to consider the type of print or negative, and its particular needs. Understanding the options available will help select the most appropriate housing for the item.

Properly chosen paper enclosures and boards can mitigate the destructive effects of pollutants and light on materials during exhibit. Enclosures are particularly important if the collection contains color photographs, nitrate film, or early safety film. For information on the nature of photographic film, see NEDCC Preservation Leaflet 5.1 A Short Guide to Film Base Photographic Materials: Identification, Care, and Duplication.

Regardless of material or process, all enclosures used to house photographs should meet the specifications provided by the International Organization for Standardization (ISO). ISO 18902:2013 and ISO 18916:2007 provide specifications on enclosure formats, papers, plastics, adhesives, and printing inks, and require that storage materials pass the Photographic Activity Test (PAT). For more information, see http://www.iso.org/iso/home.htm.

Labels such as acid-free, lignin-free, or buffered do not guarantee that a material is safe to use with photographs. Even these chemically inert papers may be harmful to the photographic image; the only way to be certain of the stability of the paper is to purchase materials that have passed the Photographic Activity Test (PAT).

The PAT consists of two components: a test to detect image fading resulting from harmful chemicals in enclosures, and a test to detect staining reactions between enclosures and gelatin. As a general rule, suppliers will note in their catalogue if a product has passed the PAT. If an item does not state that it has passed, it does not necessarily mean that it has failed; it may simply not have been tested. If there is no information on PAT results, purchase materials from suppliers familiar with the special needs of photographs. Choose enclosures that are acid free, lignin-free or 100% rag, and not highly colored – dyes and colors can contain harmful additives.

PAPER MATERIALS

The quality of pulp used in the manufacture of paper and board for storage materials is important to the preservation of photographs. Many modern papers are made from groundwood, which contains lignin, and these papers are easily degraded by heat and light. As they degrade, these acidic papers produce harmful acids that can migrate to other materials. Paper and board may also retain residual chemicals from the pulping process; sulfur and hydrogen peroxide can remain in the paper and be very damaging to all photographs.

With these concerns in mind, any paper product used for storage of photographs and negatives should be lignin-free and acid-free. Lignin-free papers are produced from cotton or linen, which contain no lignin, or from wood fibers that have had the lignin chemically removed. Enclosures constructed of paper in the neutral pH range (6.5–7.5) have no alkaline buffer. Buffered paper enclosures (pH 7.5–9.5) contain an alkaline material, such as calcium carbonate, that neutralizes acids as they form. Unbuffered paper enclosures are recommended for storage of color images, cyanotypes, and albumen prints due to their sensitivity to alkalinity.

When used on its own, the word “archival” implies long-term storage and a chemically stable material. If a catalogue or product states that something is archival without any other information, it is no guarantee of quality. It is safest to ask where the product comes from and how it is made.
An alternative to buffered paper and board are products which contain zeolites – such as MicroChamber or Artcare materials, both manufactured by Conservation Resources International. These trap acids and gaseous pollutants, segregating them from the objects in the storage environment. Research by the Library of Congress and the Getty Conservation Institute (GCI) has shown that papers and mat board with zeolites absorb more pollutants than their buffered counterparts. Unfortunately, there is no way to know when the papers are “full”, but in standard storage conditions, research conducted by Conservation Resources has shown a lifespan of up to 100 years. See the following link for more research: http://nbframing.com/data/research-on-zeolites-artcare/.

Glassine enclosures (see Figure 1) are not recommended for the storage of photographs. Although acid-free and buffered, glassine is made with short groundwood pulp fibers and can contain additives which become acidic over time.

Types of paper enclosures

Seamed Paper Envelopes are enclosures with one open end, often with a flap that opens over the top (see Figure 2). The seams in paper envelopes should be located at the sides or—if unavoidable—across the bottom. Any adhesives used in construction should be non-acidic and unreactive with silver.

Most envelopes come with a thumb cut, but those without are preferred. Thumb-cuts allow air to reach the photograph, and encourage users to grasp the photograph and pull it from the sleeve. When using seamed paper envelopes, use a paper sling inside to aid in removing the photograph and mitigate the effects of the seam.

Seamless Paper Envelopes are seamless enclosures without any adhesive. The envelope is formed with three or four flaps that fold over to produce a pocket, and is sometimes called a four-flap enclosure. The fourth flap, if present, closes the envelope completely, protecting the object within from dust and dirt. The construction of this envelope encourages the user to place the object on a flat surface to open it. These characteristics make seamless paper envelopes ideal for thick, fragile items such as glass plate negatives (see Figure 3).

Paper Folders are made by folding a sheet of archival paper in half. It is closed on one side only and must therefore be kept in a properly fitted box to hold the item effectively. If a paper folder is used for vertical storage in files, the photograph stored inside must be well supported to prevent sagging or curling. Folders are readily available in a variety of sizes, and are simple to make for large or mounted items.

Advantages of Paper Enclosures

- Enclosures are opaque, protecting the object from light
- Paper is porous, preventing the accumulation of moisture and detrimental gases
- Plastic enclosures are generally more expensive than paper
- Paper is an easy surface for writing on or labeling

Disadvantages of Paper Enclosures

- Paper envelopes make viewing difficult, requiring the removal of the object from the enclosure. This increases damage from handling, abrasion, and fingerprinting, especially in heavily used collections. If using paper, four-flap wrappers are preferred.
- In case of emergency, paper will not protect against water or moisture damage.

PLASTIC MATERIALS

Plastic enclosures of archival quality may be made of polyester, polypropylene, or polyethylene. They should not be coated or contain plasticizers or other additives.

Polyester is the most inert, dimensionally stable, and rigid of the three. However, polyester can generate static electricity, which attracts dust. Polyester enclosures should be free of any coatings or plasticizers. This is generally the most expensive type of plastic enclosure.
Polypropylene is available as rigid untreated sleeves, or soft surface-treated sheets used for binder storage pages and other uses (see Figure 7). Manufacturer specifications on the surface coatings of soft polypropylene products are proprietary information and not readily available, therefore this material cannot be properly evaluated or recommended.

Polyethylene is the most easily marred and least rigid of these plastics. High-density polyethylene (HDPE) is a translucent, milky plastic that is naturally slippery (see Figure 4). Low-density polyethylene (LDPE), the clear polyethylene used in some ring-binder storage pages, has incorporated anti-block and anti-slip agents, which could be damaging for photographs.

Polyvinylchloride (PVC) enclosures are unacceptable for archival photographic storage. This plastic, often referred to as vinyl, is not chemically stable and will cause deterioration of a photograph over time.

**Types of Plastic Enclosures**

Plastic Envelopes normally have heat-sealed seams, which eliminate any potential problem with adhesives. Both polyethylene and polyester envelopes are marketed by conservation product suppliers.

Plastic Folders may be successfully used in conjunction with paper envelopes, the polyester folder protecting the image from handling whenever it is removed from the paper envelope.

L-Velopes are a combination envelope-folder, being an envelope sealed on two adjacent sides. This allows for easy insertion and removal of objects, and provides more support than a folder. This design is particularly useful for smaller-format images (see Figure 5).

Plastic Sleeves are open at two opposite sides and are made from polyester or polypropylene. Usually, these sleeves are a one-piece construction with a self-locking fold on one edge (also called top-flap or fold-lock sleeves). This fold allows easy insertion and removal of the photograph with no abrasion to the image. However, when these sleeves are stored in groups, the folds can lock onto adjacent sleeves, making retrieval of the photographs difficult.

Polyester Encapsulation encloses a photograph between two sheets of polyester, sealed on all four sides with a heat welder or an ultrasonic welder. For examples, see [http://conservationresources.com/Main/section_17/section17_03.htm](http://conservationresources.com/Main/section_17/section17_03.htm). Ultrasonic welders were developed and are still produced by William Minter, in Woodbury, PA.

Encapsulation provides physical support and protection from the environment. It is useful for storing fragile prints, especially those that are torn. However, encapsulation is not recommended for certain items which require more exposure to air, such as contemporary color photographs. Photographs adhered to chemically or physically unstable supports, like prints attached to acidic pages, are also not appropriate for encapsulation.

Ring-Binder Storage Pages are made to fit three-ring binders with slipcases (see Figure 7). They are available in a wide variety of formats, sizes, and materials, including polyester, polypropylene, and polyethylene. They are a functional alternative for small collections of uniform size that require frequent browsing.

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**Figure 4**: Cabinet card stored in high-density polyethylene enclosure

**Figure 5**: Carte-de-visite housed in polyester L-sleeve

**Figure 6**: Cabinet card stored in polyester fold-lock sleeve

**Figure 7**: Polypropylene three-ring binder storage page for 3 ½ " x 5" photographs.
Polyester Sheet/Mat board Folders are made of a sheet of polyester and a sheet of matboard of the same size, attached together along one long edge with double-sided tape. The matboard provides necessary support and the polyester allows the image to be easily viewed. These folders should be stored flat. They are particularly useful for storage of oversized photographs or photographs on rigid mounts. In time, these folders will probably need to be replaced or the double-sided tape will break down, releasing the polyester from the folder and possibly sticking to the object.

Polyester Sheet within a Paper Folder is a combination of paper and plastic which protects the image while allowing for easy access. This enclosure consists of a paper folder with a polyester sheet attached along an inner edge, opposite the centerfold. The attachment is made with double-sided tape. The polyester holds the object in place and protects it from dirt and handling, but allows for easy viewing and removal. The paper folder provides support to the image and protects it from light. These folders are especially useful for small, fragile prints. Over time the double-sided tape may release, or the adhesive can ooze out from under the carrier, necessitating folder replacement.

**Advantages of Plastic**

- Plastic allows the image to be viewed without being removed from the enclosure. This greatly reduces the chance of abrading, scratching, or fingerprinting the photograph, especially in heavily used collections.
- Moisture and sulphides in the environment react with most photographs to hasten their deterioration. Plastic enclosures protect the object from the atmosphere.

**Disadvantages of Plastic**

- Plastic enclosures can abrade and scratch photographs during insertion and removal. Matte or frosted surfaces are not recommended, as they are abrasive to emulsions. Low-density polyethylene also can cause problems with abrasion. Abrasion can be avoided by minimizing the removal of photographs from enclosures, using properly designed enclosures (such as self-locking sleeves), or using plastics that are naturally slippery (high-density polyethylene).
- Plastic enclosures can trap moisture and cause ferrotyping (sticking with resulting shiny areas) of some images. This is particularly problematic in storage environments with high relative humidity or in the event of a disaster involving water. Surface-treated polypropylene and low-density polyethylene are among the plastics more prone to ferrotyping.
- Plastic enclosures can be difficult to write on or label.
- Plastic enclosures can be flimsy and may require additional support, such as chemically stable Bristol board.
- Plastic enclosures with low melting points (i.e. polyethylene) can melt during extremely high heat, adhering themselves irreversibly to the materials stored inside them.

**CONCLUSION**

Photographic materials require a range of preservation considerations, depending on the type of process, age, and condition. Each of the enclosures available has its own advantages and disadvantages, which require careful consideration when purchasing. Sometimes, combining more than one format may be the best solution – putting plastic sleeves into paper envelopes, and so on.

The final choice of enclosure will depend upon careful assessment of the particular needs of a collection and available funds, taking into consideration the materials to be preserved, best practices, and institutional priorities. With proper storage, photographic materials can be preserved for future generations.

**GLOSSARY**

**Acid Free:** Acid-free or acid-neutral materials have a pH of 6.5 to 7.5 at the time of manufacture and will absorb a limited amount of acid before they themselves become acidic and begin to decay.

**Archival:** The word “archival” implies long-term storage and a chemically stable material. If a catalog or product states that something is archival without any other information, ask why it is described that way.

**Buffered:** Buffered or alkaline-buffered enclosures contain an alkaline substance (the buffer) to raise the pH of the paper so it can absorb and/or neutralize a certain amount of acid. The pH of buffered papers is 8.5 or higher.

**Lignin-Free:** Lignin is a natural component of wood that darkens when exposed to light and is a cause of brittle, acidic paper. Lignin-free paper is produced from cotton or linen, or other materials from which the lignin has been removed.
**Molecular Trap or Sieve:** A material that combines an alkaline buffer with either activated carbon or zeolites. These storage materials provide protection against environmental pollutants and by-products of deterioration not neutralized by alkaline buffers alone. Most commonly found products are under the MicroChamber name.

**Photographic Activity Test (PAT):** The PAT is an international standard test (ISO 18916:2007) for evaluating photo storage and display products and was developed by the Image Permanence Institute (IPI). Enclosures used for photographic materials must pass the PAT (this should be noted in the supplier catalog) and those that pass would be appropriate for other types of collection materials as well.

**pH:** The term pH is used to express acidity or alkalinity. It does not apply to plastics. The pH scale is logarithmic and runs from zero to 14, with 7 being neutral, below 7 being acidic, and above 7 being alkaline. For storage enclosures, a pH of 6.5 to 7.5 is considered neutral.

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**RESOURCES**

Library of Congress Preservation Division


International Standards Organization

http://www.iso.org/iso/home/store/catalogue_tc/catalogue_tc_browse.htm?commid=48420

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CONSERVATION PROCEDURES

7.8 Removal of Damaging Fasteners from Historic Documents

Fasteners such as staples, paper clips, string ties, rubber bands, brads, and straight pins frequently damage documents. The damage may be physical: puncturing, tearing or distortion such as creasing. Or chemical damage may result such as staining from the rusting of metal fasteners.

Potentially damaging fasteners should be carefully removed from archival documents before they are put into long-term storage. Fasteners should always be left in place if removing them will cause damage.

Sealing wax, ribbons, thread ties or stitches, and unusual metal fasteners have value as artifacts and/or enhance the value of historic documents. The decision about the retention or removal of such fasteners is a curatorial one. When in doubt, these should always be left in place.

If records must be kept together by a fastener for the convenience of readers or staff, the National Archives now recommends that a piece of durable, alkaline paper in a card stock weight be folded over the top of the group of documents, with a paper clip slipped over the protective overlay (Figure 1). Potentially damaging original fasteners should first be removed.

Although they do not stain paper, plastic or coated metal clips will cause distortion of paper and are not recommended.

**REMOVING PAPER CLIPS**

If the paper clip has not rusted and the paper is sturdy, a paper clip can be removed by gently prying it open. The safest method is to place the fastened papers with the short side of the paper clip facing up and the long side against a flat surface (Figure 2). Holding the long side of the clip down (through the paper) with one finger, carefully pull up on the short side with the thumb-nail of the other hand. If your fingernails are not long enough to get under the short side of the clip, use a small, flat tool. Conservators recommend microspatulas, which are available from sellers of conservation or scientific supplies.

With fragile papers or papers to rusted by the clip: gently insert a small piece of Mylar between the clip and the paper on both sides; position the papers, and pry open as above. If the paper clip is severely rusted, first loosen it from the paper by scraping through the rust layer very gently with the tip of a microspatula before inserting the Mylar and gently prying the clip open.

**REMOVING STAPLES**

Do not use staple removers. If the staple has not rusted, and the paper is sturdy, a staple can be removed by gently prying the prongs pen and carefully slipping them through the puncture holes. The safest method is to place the stapled papers on a flat work surface with the prongs of the staple facing up. Insert the tip of a microspatula between the paper and

https://www.nedcc.org/free-resources/preservation-leaflets/7.-conservation-procedures/7.8-removal-of-damaging-fasteners-from-historic-documents
a prong of the staple and gently pry open one prong at a time (Figure 3).

Turn the stapled papers over and insert the microspatula between the staple and the paper, and carefully slip the prongs through the puncture holes (Figure 4).

With fragile paper, or papers to which the staple has rusted: gently insert a small piece of Mylar between the staple and the paper on both sides (Figure 5); position the papers, and pry open as above. Cut Mylar into strips which are slightly smaller than the width of a staple (or tapered) to make the Mylar easier to insert. If the staple is severely rusted, first loosen it from the paper by scraping through the rust layer very gently with the tip of a microspatula before inserting the Mylar and gently prying prongs open and removing the staple.

Subject to curatorial decision and/or time or labor restrictions, unrusted staples may be left in place during long-term storage of historic documents, provided that environmental conditions are not conducive to rust. Staples should be carefully removed as necessary, for example for photocopying.

**STRAIGHT PINS**

If the straight pin has not rusted, and the paper is sturdy, a straight pin can be removed by gently pulling it through the paper. With fragile papers or papers to which the pin has rusted, gently insert a small piece of Mylar between the pin and the paper at all three points of contact and carefully pull the pin through the paper (Figure 6). If the straight pin is severely rusted, first loosen it from the paper by scraping through the rust layer very gently with the tip of a microspatula before inserting the Mylar and gently pulling the pin out.

**STRING TIES/RUBBER BANDS**

Cut the tie or band and gently lift it off. Do not attempt to pull these fasteners over the ends of documents. If a rubber band has dried and adhered, gently scrape it off with a microspatula, being careful not to abrade or tear the paper. If the rubber band is soft and sticky, do not use solvents. Sticky residue may be gently scraped off with a microspatula. If this residue does not come off easily, interleave the sheets with silicone release paper to keep them from sticking together and consult a conservator.
Additional Resources

Emergency Planning, Response and Recovery Links:

Conservation On-line (CoOl) has a website that is a clearinghouse for an enormous amount of information from other institutions on emergency management and general preservation. It contains a lot of examples of disaster plans. http://cool.conservation-us.org/topics.html

Minnesota Historical Society’s Disaster Plan is a 96 page comprehensive plan that includes many types of disasters large and small. It covers actions, responsibilities, equipment and supplies, safety considerations, what to do for each different type of material in their collection and much more. http://cool.conservation-us.org/topics.html http://www.mnhs.org/preserve/conservation/reports/emergencyplan.pdf

Syracuse University Disaster Recovery Manual is a 23 page document that addresses how they salvage various types of materials, what supplies they use, what time frame it needs to be done in, and when something cannot be saved. It includes photos of salvage procedures. http://surface.syr.edu/cgi/viewcontent.cgi?article=1065&context=sul

The Northeast Document Center for Conservation website has an emergency management section in their “Preservation Leaflets” collection. Here you will find good information on planning for disasters, salvage information for a variety of materials, discussions of pest management and security as well as a bibliography on the topic. http://test.nedcc.org/free-resources/preservation-leaflets/overview http://surface.syr.edu/cgi/viewcontent.cgi?article=1065&context=sul

American Institute for Conservation is a valuable resource. On their website you will find information on emergency preparedness for cultural heritage institutions. It has tools useful in risk assessment, planning, response, recovery, emergency management education, finding partners and funding. Whatever information they don’t have, they have links for. http://www.conservation-us.org/publications/disaster-response-recovery/guides-and-information/if-you’re-first#.VxpqStQrJpg http://www.conservation-us.org/publications/disaster-response-recovery/guides-and-information/if-you%27re-first - .VxpqStQrJpg

Keep Calm and Carry On is a dynamic, self-paced slide presentation that addresses emergency response issues including assessment of damage, triage, prioritizing, and salvage advice for a variety of materials. It ends with a short quiz to test your new knowledge. This presentation is credited to Iowa State University and the State Historical Society of Iowa. https://prezi.com/octldrpii-ot/keep-calm-carry-on/
The Heritage Preservation (The National Institute for Conservation) website has a variety of helpful links and downloads to help you create your disaster plan and learn more about emergency preparedness for cultural heritage institutions.
http://www.heritagepreservation.org/PROGRAMS/TFresources.html

**Environmental Controls Links:**

Assessing Preservation Needs from the Northeast Document Conservation Center, from which the included survey forms are taken, lays out how to conduct a full preservation assessment of an institution. It also contains an extensive bibliography of print resources.
https://www.nedcc.org/assets/media/documents/apnssg.pdf

The History and Heritage section of the Canadian government’s website contains an in-depth description of the agents of deterioration, with vignettes showcasing challenges and solutions for each agent.
http://canada.pch.gc.ca/eng/1444330943476

The Northeast Document Conservation Center’s series of preservation leaflets includes several on environmental considerations. They lay out guidelines, instructions on monitoring the environment, and advice on getting the most from your climate control system.
https://www.nedcc.org/free-resources/preservation-leaflets/2.-the-environment/2.1-temperature,-relative-humidity,-light,-and-air-quality-basic-guidelines-for-preservation

The National Park Service has a series of brief Conserve-O-Grams on a variety of cool museum preservation topics, including safety, storage options, and care of different types of objects. (at this point in time the website appears to be experiencing difficulties)
https://www.nps.gov/museum/publications/conserveogram/cons_toc.html

This Conserve-O-Gram provides tips for identifying several common museum pests. It is a useful first stop for identification due to its brevity.

MuseumPests.net, a site run by the Integrated Pest Management working group, provides extensive resources on identifying, monitoring, and dealing with pests.
http://museumpests.net/
Storage & Handling Links:

STASH (Storage Techniques for Art, Science and History) is a site that provides storage solutions and DIY instructions for creating functional storage spaces for specific collections. While some of the options may be cost-prohibitive, STASH shares solutions for institutions of all types and sizes and they also may assist you in developing personalized storage solutions for your own spaces.

http://stashc.com/

The NEDCC has a great section with resources on caring for private and family collections. This is a wonderful resource for smaller collections because these focus on small collections that have a limited budget or don’t have a dedicated or professionally trained archivist. The “further reading” link on the right hand of the page also has even more great information on storing and working with small collections.

http://test.nedcc.org/free-resources/preserving-private-and-family-collections/caring-for-private-and-family-collections

Preservation Supplies Links:

Gaylord, Hollinger Metal Edge, and University Products are all trustworthy sites from which to buy storage materials, from folders to polyurethane sheets to boxes to gloves. All three sites have sales and both Gaylord and University Products have email sign-ups that will send you updates and special offers.

http://www.gaylord.com/
http://www.hollingermetaledge.com/
http://www.universityproducts.com/

STASH, linked to above in the Storage and Handling Section, additionally has a comprehensive spreadsheet of materials and suppliers listed by specific material.

http://stashc.com/resources/materials-and-suppliers/
Sustainability: Outreach and Funding

Grace Chamberlain
Caroline Hogan
Kery Lawson
Part 1. Outreach

➔ Know your visitors and users
➔ Connect with users and their needs
➔ Promote
   → Digital and physical advertising!
➔ Evaluate
   → Measure the success of your programs to improve your future efforts!
Step 1: Who uses your services?
Who doesn’t?

1. In your community: genealogists, other organizations, school groups, and other populations (use census information!)
2. Outside your community: Travelers, roadtrippers, internet users

Step 2: Get to know your users. And their needs.

Tools you can use:
1. Individual face-to-face interactions
2. Focus groups or advisory boards for specific groups/populations
3. Online feedback/comment forms
4. Comment boxes (physical)
5. Guest books (physical)

Step 3: Development

Develop programs to fit the needs of specific user groups and populations:
What part of your collection will connect with different age groups or interests? Will it be hosted in your institution or outside of it?
Active programs: hosting an event
Passive programs: creating an exhibit
Develop community partnerships and collaborations to help make programs a success: What other organizations have missions that reflect connect with your own? What ways can you help or benefit each other?
Step 4: Promotion

1. Web presence
2. Signs and physical access to building
3. Informational pamphlets (what is your organizational identity? logo?)
4. Local newspaper ads and regular columns
5. Radio spots and television ads

Step 5: Evaluation

Ways to evaluate your programs and services:
1. Surveys after programs and events
2. Cost/benefit or Return on Investment analyses
3. Social media statistics
4. Patron counts at events

Benefits:
1. Help improve future programs
2. Provide you with hard data that will prove your value, helping you get more community support, funding, etc.

Part 2. Funding

➔ Budget Management
➔ Identifying Funding Sources

Through your local community, online sources, and grants (both large and small)
Budget Management
Create a bank account and develop a budget

Basic Accounting

Identify Funding Sources
Local Funding (community supporters or fundraisers)

Online Funding (Kickstarter, Gofundme, etc.)

Grants (large and small, local and global)

Typical Grant Writing Timeline

- **October 2016**: Start grant writing process
- **January 2017**: Communicate with potential funders and collect materials
- **October 2017**: Submit final grant proposal

**Important Note:** Do you need to match funds?

- **June 2017**: Draft of grant proposal
Action Steps

Outreach and Marketing

First Steps
- Identify your patron/user groups and learn about their needs
- Develop programs and events to meet each user group’s needs

Next Steps
- Promote your programs to specific user groups
- Evaluate the success of your programs to improve future programs

Advanced Steps
- Develop partnerships with community partners to develop programs, events, and even curricula
- Use social media analytics tools to measure your impact (see website)
- Use census data and other demographics tools to identify user groups in your area (see our website for resources and online tools)
- Create focus groups and advisory boards for different user groups

Funding

First Steps
- Develop a budget and create a bank account

Next Steps
- Find local sources of fundraising (community partnerships or fundraising events)
- Create online funding (gofundme, kickstarter, listed on our website)
Advanced Steps

☐ Apply for grants (8 months–1 year process)
  ○ Identify grants and granting agencies that could fit your needs (see website for lists of grant programs and granting agencies)
  ○ Create team of grant writers and collaborators
  ○ If required to match funds, develop process for doing so
  ○ Create, revise grant, modeled after grant agency requirements
  ○ Submit grant
  ○ Hopefully get money
Outreach and Programming Worksheet

Which user group do you want to serve? What are their ages? Interests?

How can you gather information on these users? Can you create a focus group? Surveys?

Now that you’ve gathered information, which needs can you fulfill for this user group?

What kind of program can you develop to serve this user group’s needs? Which community organizations can you partner with in order to develop this program?

How will you promote this program?

How will you assess the success of this program? Exit surveys? Patron counts? Statistics?
Funding Worksheet

Grant Timeline: 8 months to 1 year before deadline
What parts of your institution need priority funding? (Programming, populations, collection/preservation needs, etc.)

Which grants are you applying for to meet these priority funding needs?

Who do you want on your grant writing team? With whom will you collaborate to execute this project?

Can you get other funding from other organizations (cost share)? Does the grant require you to match funds? How will you raise those funds?

Grant Content Creation
Why should your receive this grant? What impacts will this program or effort have on your institution, local community, and a wider audience (or the historical record)?
What are your project goals?

How would you describe the need(s) that this grant will fulfill/address?

Who are the participants, organizers, and collaborators (staff members, volunteers, other community organizations, etc.) for this project?

What is your project budget?

What is your project timeline? How long will it last? How many steps and/or phases are there?

How will you evaluate the success of your program?
Resources

Find more resources and online guides and templates on our website!

Community Partners:
Local businesses
Schools (not just as users, but as volunteers!)
Library
Social groups - Clubs, Girl Scouts & Boy Scouts, Community Development Groups, Sports Leagues
Church groups
Local Newspapers/radio stations/TV
Local Government

Marketing Resources:


Ruth Rentschler and Anne-Marie Hede, editors, Museum Marketing: Competing in the Global Marketplace (Butterworth-Heinemann, 2007)