

Conservation Kitchen: Recipes for Disaster!

WASHINGTON STATE LIBRARY



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Secretary of State
SAM REED

Environment

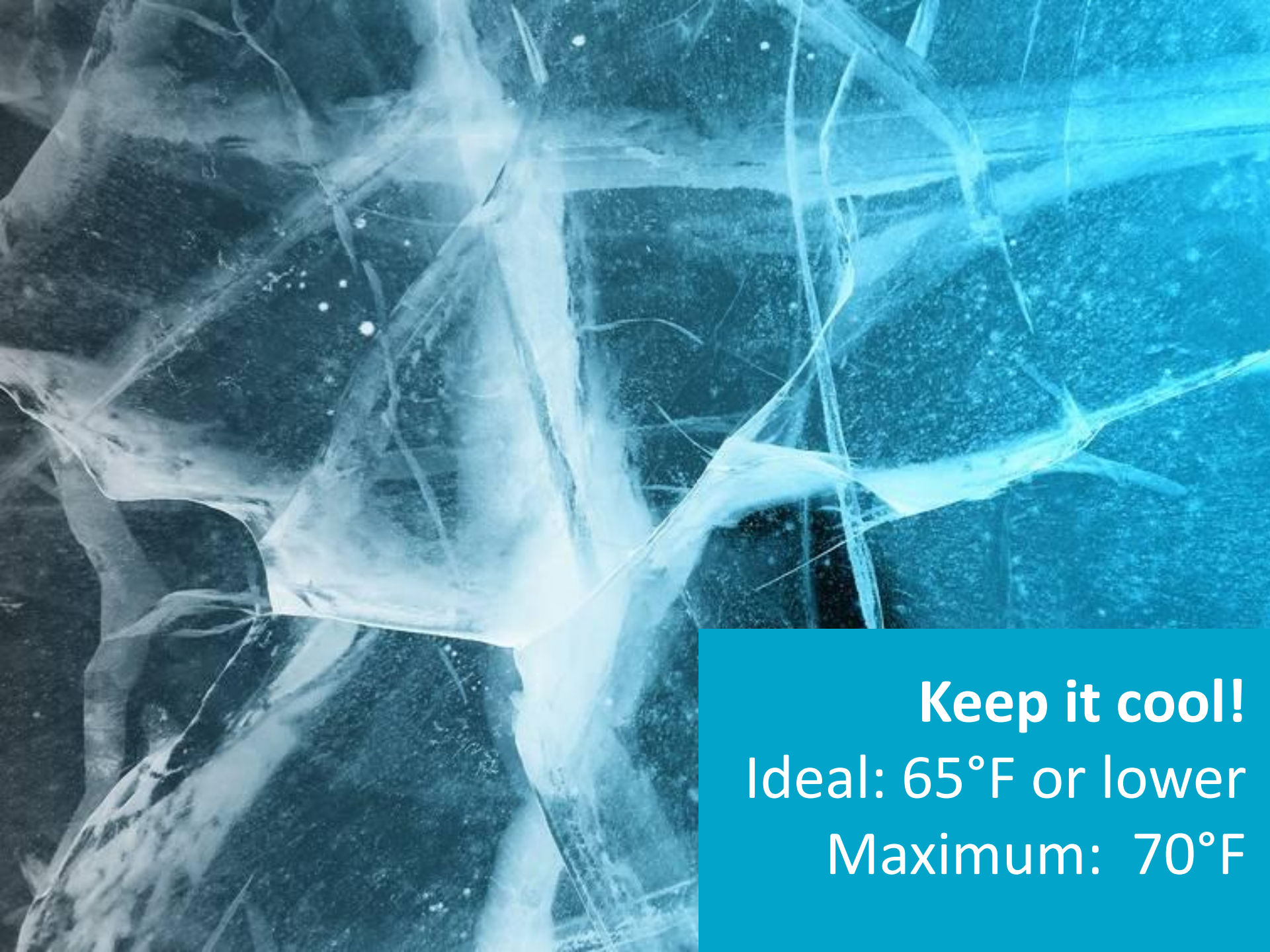




Hot and steamy

Great for mold and insects.

Bad for your collections.

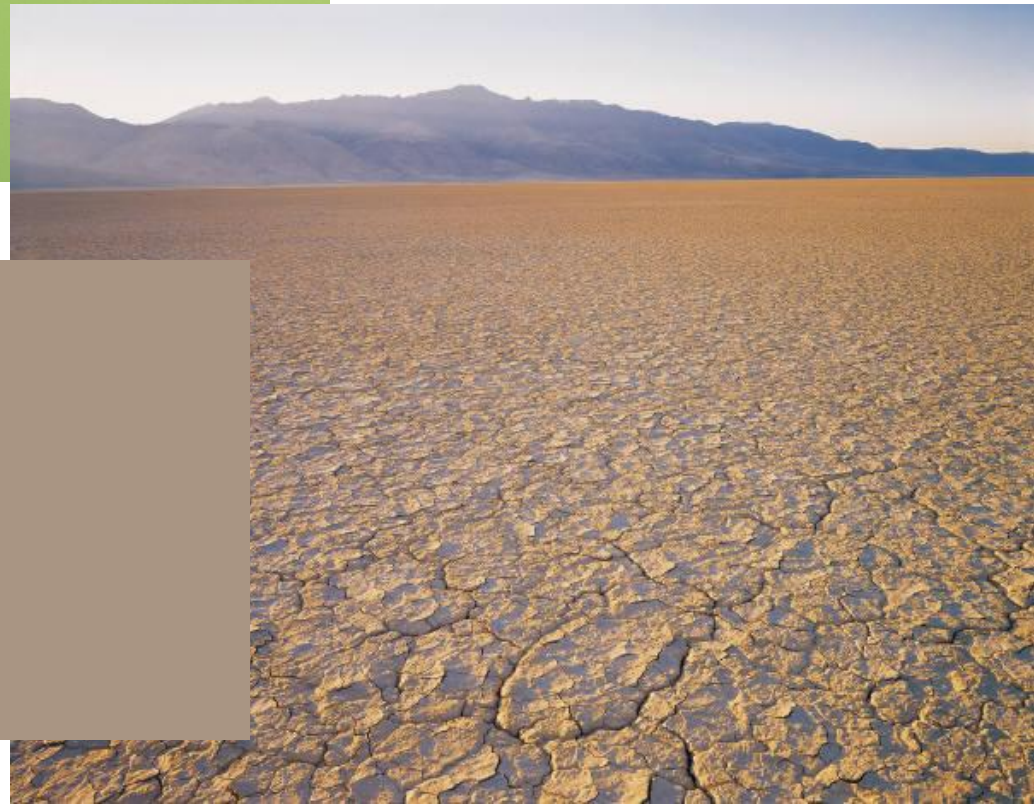


Keep it cool!
Ideal: 65°F or lower
Maximum: 70°F



Not too wet ...

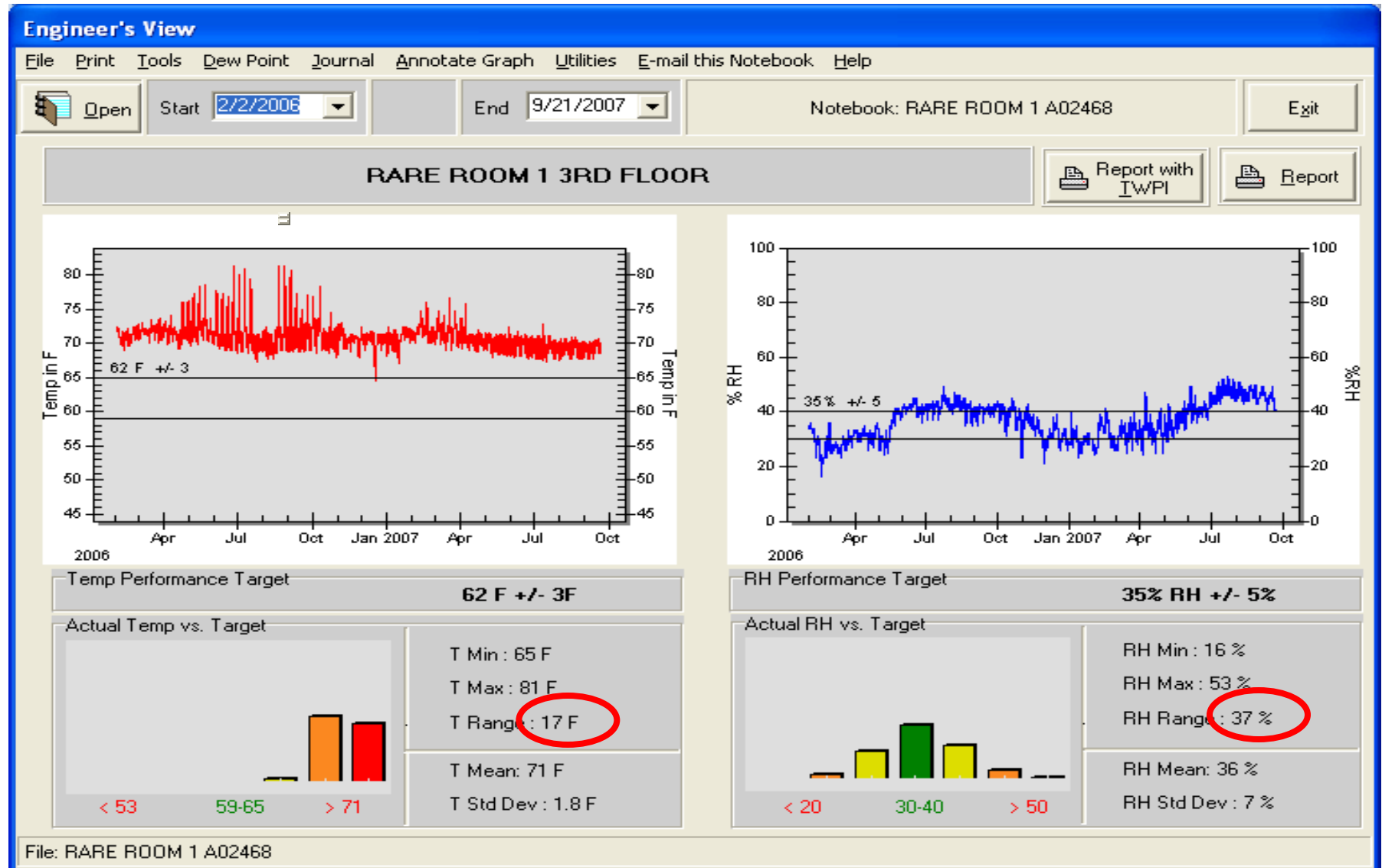
(RH should be no higher than 50%)



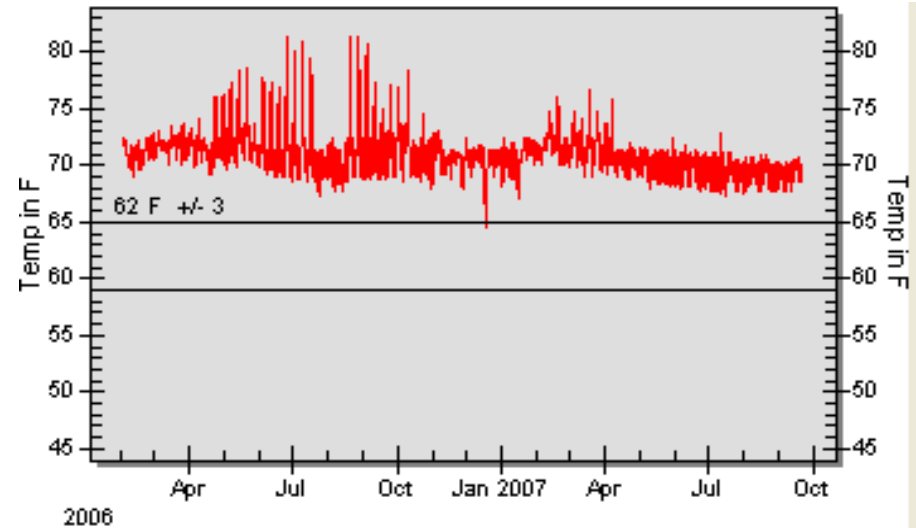
...but not too dry!

(RH should be no lower than 30%)

Above all - keep it stable!



Watch those spikes!



Keep fluctuations to a minimum:

Temperature: no more than 2°F
RH: no more than 3%

HOBOS or PEMS can help!



**Great for
roasting
chestnuts –
but not for
collections**





**Light +
collections =
deterioration**

Adhesives

Archival Storage

Bookbinding Tools & Supplies

Books

Chemicals & Deacidification

Cleaners and Polishers

Environmental Controls, Instruments & Measures

Fabrics & Textiles

Fasteners & Hardware

Films & Non-Wovens

Frames & Framing Supplies

Gilding & Finishing Materials

Hot Stamping Machines & Tools

Kits & Supplies for Everyone

Leathers, Vellums & Parchment

Pigments, Paints, Dyes & Inks

Safety & Laboratory Supplies

Sample Books

Specials & New Products

Tissues, Papers & Boards

Tools & Brushes

Index of Products

Browse All Products By Category

[Environmental Controls, Instruments & Measures](#) > [Light Testing](#)

BLUE SCALE TEXTILE FADING CARDS



(aka BLUE WOOL
FADE CARDS,
BLUE SCALES,
BLUE WOOL CARDS)

Used as light fastness standards, to monitor the net exposure to light of art objects on display, and to alert conservators to rotate an exhibit or to reduce the intensity of illumination.

Eight pieces of wool cloth tinted with blue dyes of different degrees of fastness mounted on a 5"x1 1/2" card. These cards conform to the ISO 105-b01 standard.

Please note: There are two cards pictured above, the one on the left represents a "control" card that is stored in total darkness. The one on the right, (displayed here for contrast only) has been exposed to UV light and has faded.

Item	Description	Price	Quantity
TEC025001	Each	1-9 : \$ 14.10 each 10-49 : \$ 13.10 each 50-99 : \$ 11.60 each 100+ : \$ 9.60 each	<input type="text"/>

[ADD TO CART](#)

KEEP IT CLEAN!



**Do you have a
problem with
off-gassing?**



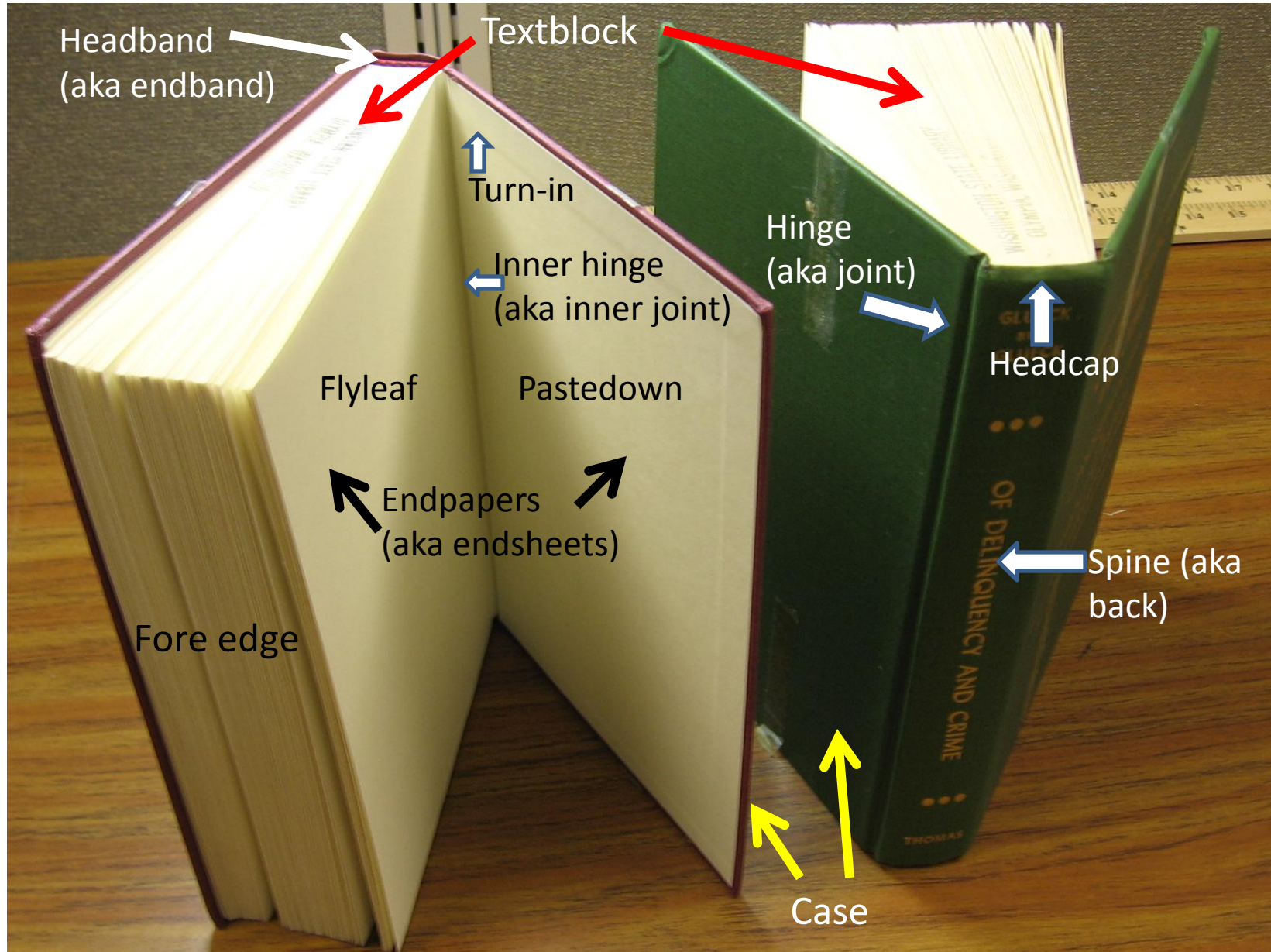
**Limit the use
of chemicals
and cleaning
products
around
collections**



An anatomy lesson



Parts of a book



Be prepared!



**Attend a
FREE
workshop
and be
prepared!**



**GO TO WESTPAS
www.westpas.org**



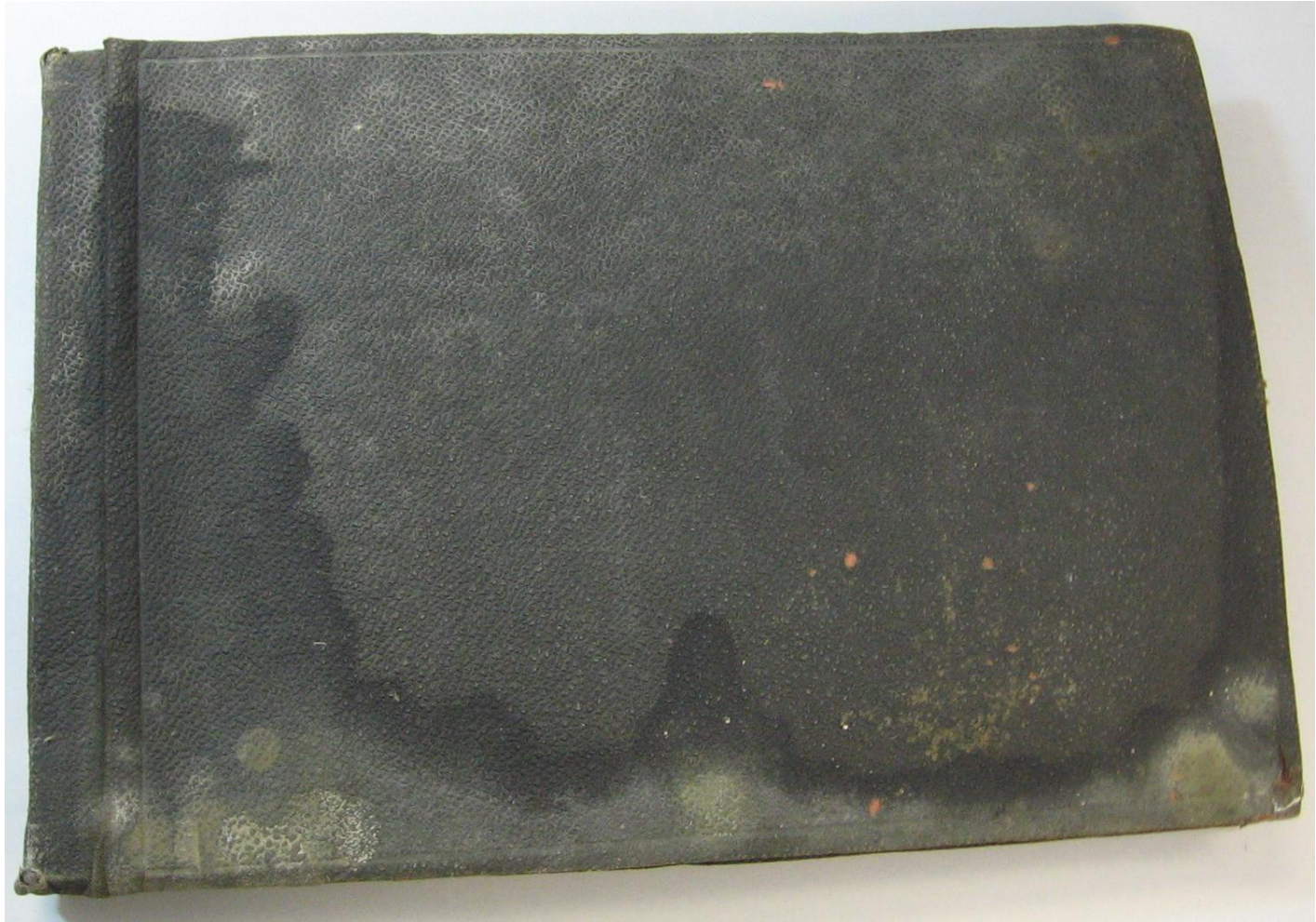
Have a disaster plan in place





**Get to know your
local first
responders—
BEFORE an
emergency
arises!**

Act quickly to avoid big problems!

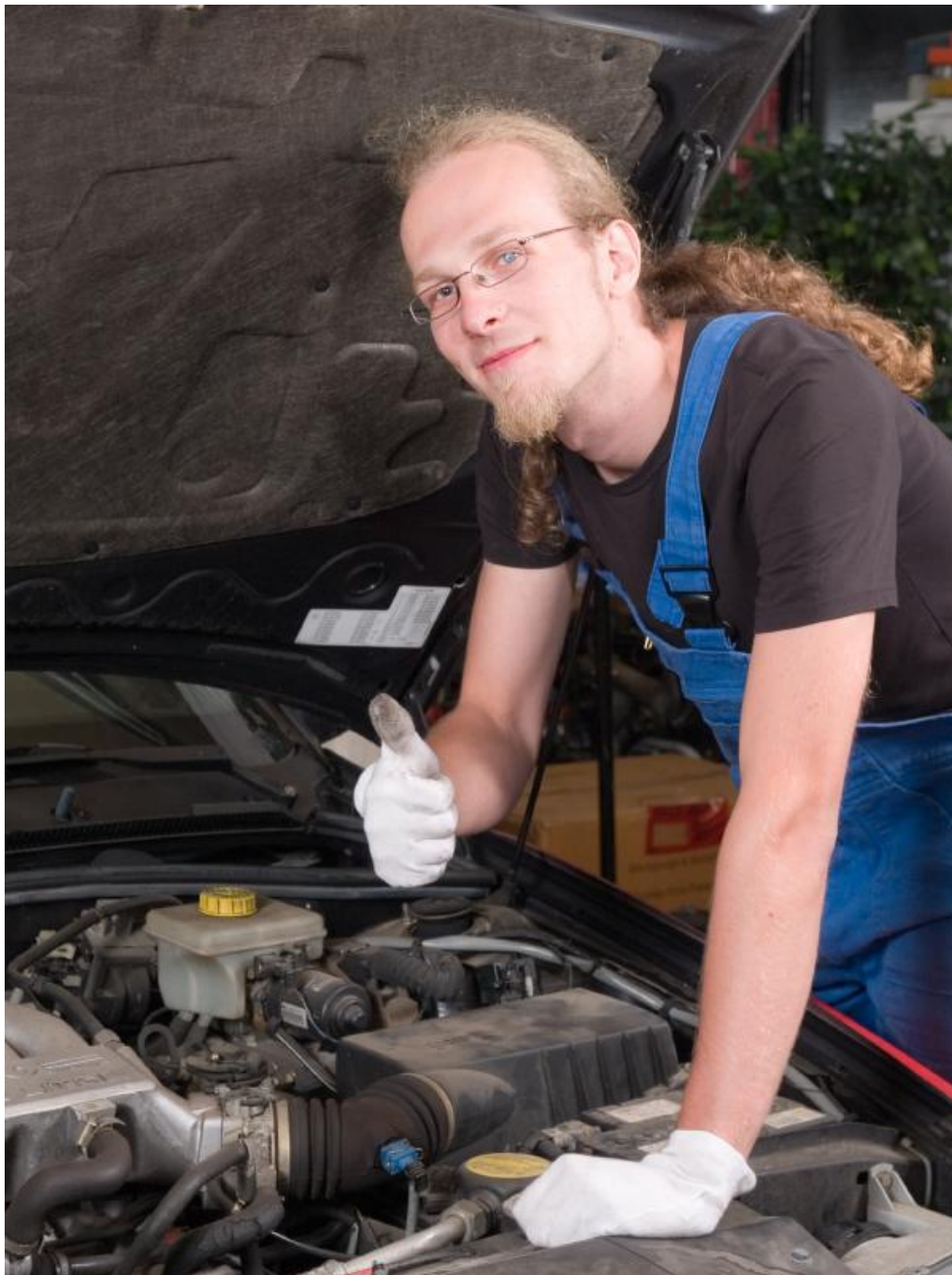


Care and handling





**When
nature calls,
resist the
urge to
bring
reading
material
with you!**

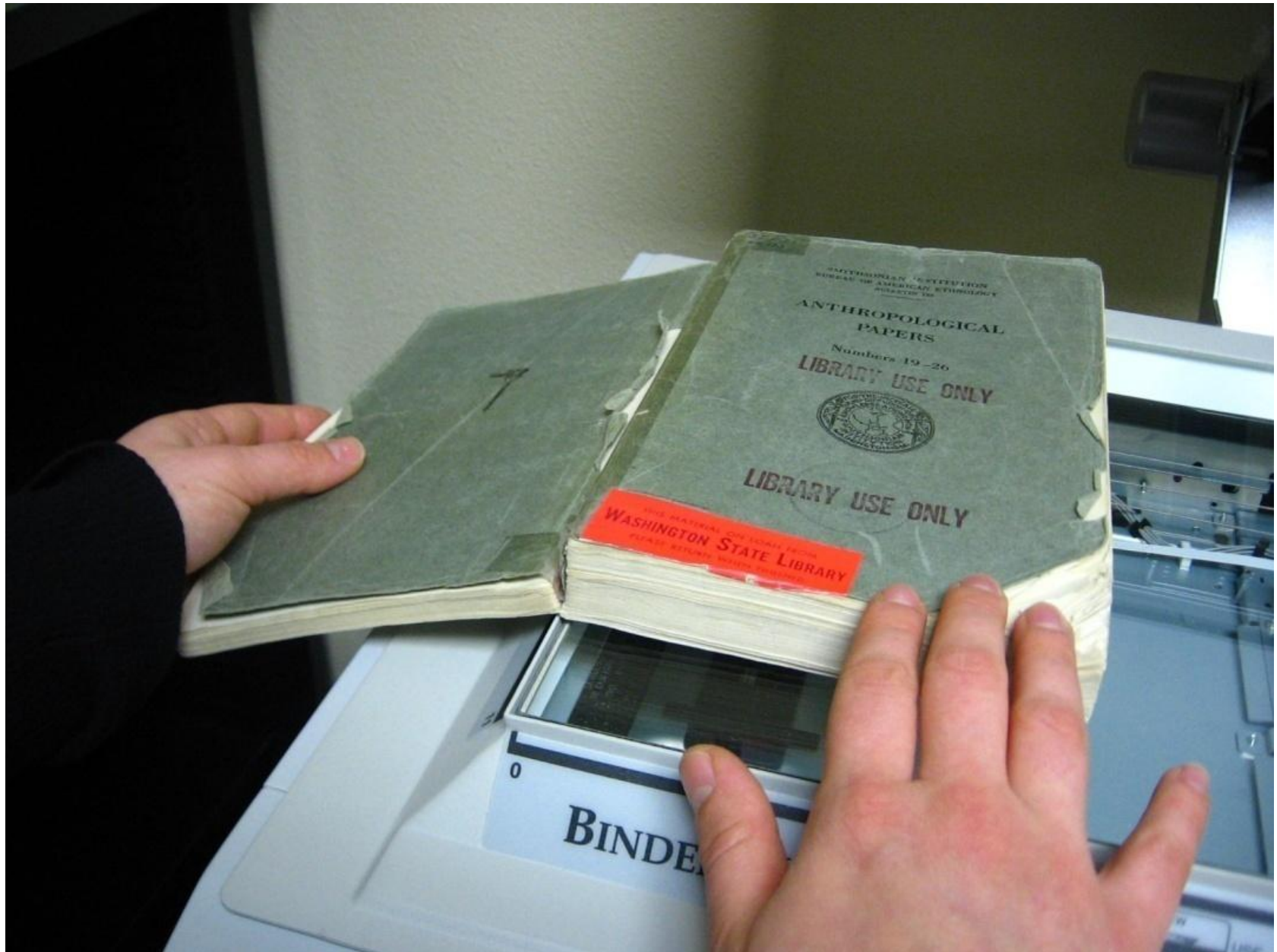


**What about
white gloves?
(Tie and tails,
optional)**

Stop! You're breaking my back!



Much better!



**Take a
picture –
It will last
longer!**



Cradle your books



Speaking of cradles...



www.cool.conservation-us.org/coolaic/sg/bpg/annual/v04/bp04-01.html

www.nps.gov/history/museum/publications/conserveogram/18-01.pdf

Don't let your book trucks look like this!



These need more support!



Never remove a book from a shelf by pulling on its headcap!

Wrong way!



Right way!

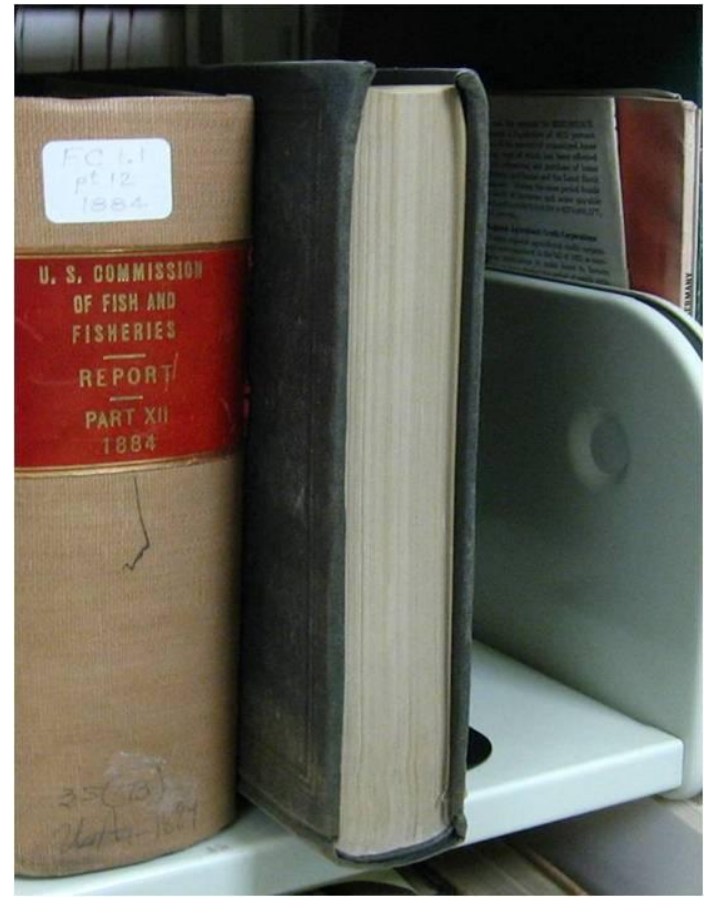


Never shelve a book on its fore edge!

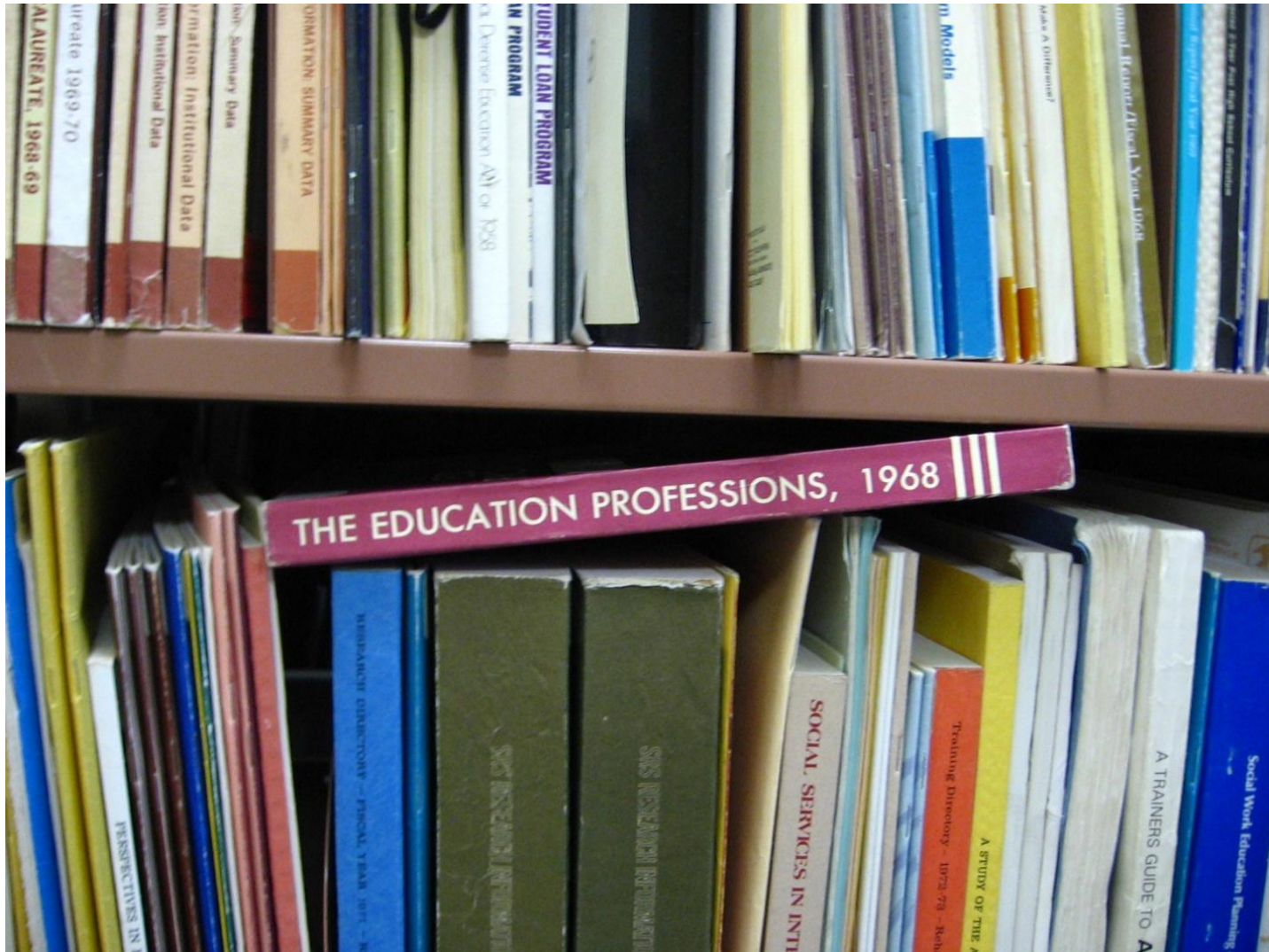
- **Wrong way!**



- **Right way!**



Don't use the tops of books as a shelf!



Too tight!



Just right!



Sometimes neighbors can be incompatible



Book shoes???!!!!

www.nedcc.org/resources/leaflets/4Storage_and_Handling/07BookShoe.php



Shopping for supplies

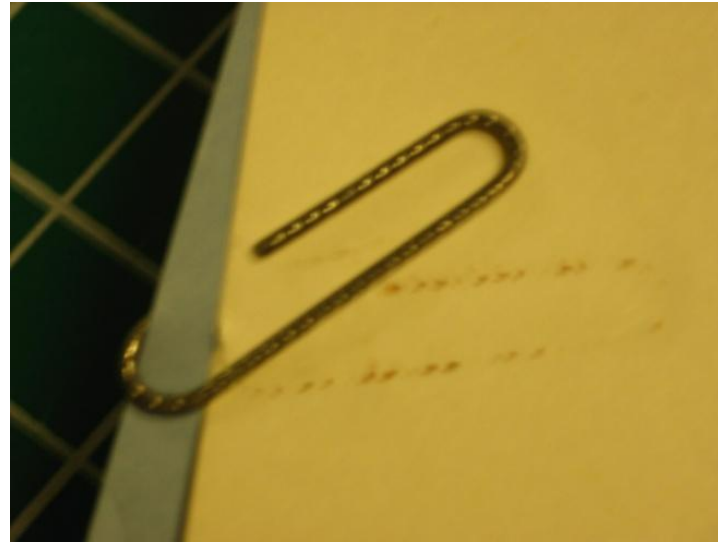
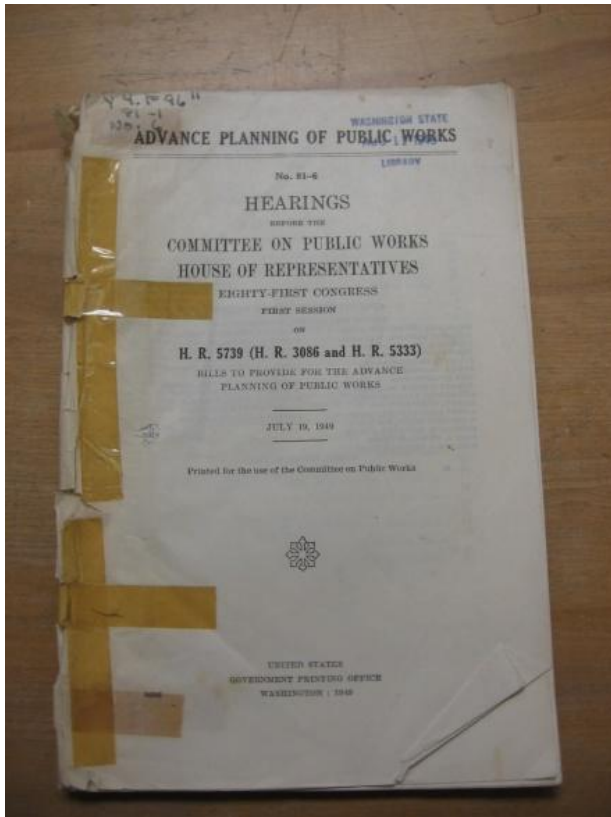




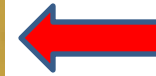
Bad uses of office supplies:



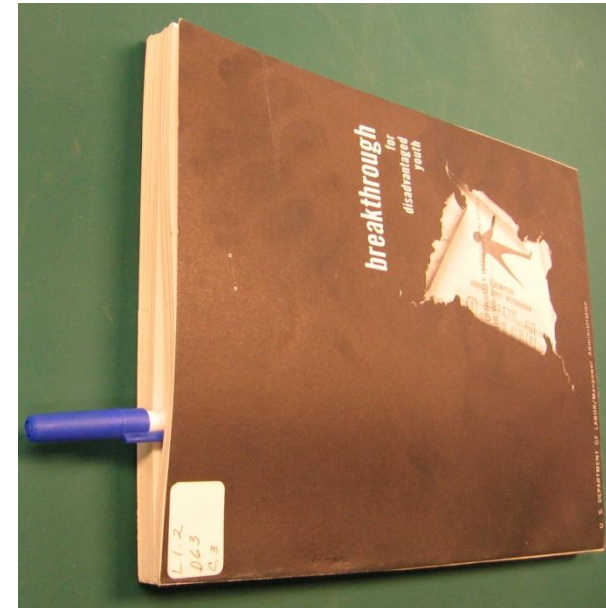
Cellophane Tape



Paper clip (see the rust stain!)



Pen as bookmark



Twine: It dices! It slices!

Section IV
Part 1

Section X Periodic Inspections

Col.
27



Figure 936—Measuring End Play of Rotor

HYDRAULIC TURBOSUPERCHARGER REGULATOR

Check regulator for proper mounting, tightness of external oil seals and oil seals which could permit oil leakage. Maximum allowable leakage at the servo piston rod is one drop per minute with oil temperature of 71.3°C (160°F) and an oil pressure of 50 pounds per square inch. If oil leakage exceeds this value the regulator should be removed, and the oil seals replaced. Check for possible accumulation of moisture in exhaust manifold pressure chamber.

ELECTRONIC TURBOSUPERCHARGER REGULATOR SYSTEM

25/30-HOUR INSPECTION

Waste Gate Motor.
Check AN connector to see that it is inserted properly and is tight.

CAUTION

Never disconnect AN connector of waste-gate motor when inverter is on; this is apt to damage the amplifier.

Make sure motor is mounted solidly and has not shifted in position.

Governor and Flexible Drive.

Inspect AN connector on governor to make sure it is properly inserted and tight. See that the nut on flexible-drive connection is not cross-threaded and that it is tight.

Check governor mounting to make sure that governor is held solidly in place and has not shifted its position.

Operation of Amplifier and Waste Gate Motor.

Plug in external power supply. Carefully check voltage of external power supply. (Voltages higher

RESTRICTED
AM 01-5E-2

RESTRICTED
AM 01-5E-2

Col.
27

than 2.5 volts dc may result in weakened or burned out amplifier tubes.) Turn on inverter switch. Set dial of turbo-boost selector at "R". Remove AN connector on Pressuretrol and plug in the 4-wire test potentiometer in place of Pressuretrol. Turn knob on test potentiometer until waste gate is fully closed.

Note

If the suggested test potentiometer is not available, the "jumper" method can be used without removing the AN connector of the Pressuretrol. Refer to Section IV, paragraph 7, for jumper method.

Clearance of Linkage Rod.

Check to see that there is at least 1/8-inch clearance between the linkage rod and any structural part of the engine for all positions of the waste gate. Since the exhaust stack and turbine move backward an appreciable amount when heated, this much clearance is necessary to keep the linkage from binding.

Clearance of Waste Gate From Stop.

With the waste gate in the fully closed position, the waste gate should be approximately 3/32-inch away from the stop inside the exhaust pipe.

Waste Gate Positions.

Remove test potentiometer and for closing waste gate, and replace Pressuretrol AN connector. If jumper method was used, remove jumper and replace "F" box cover. Turn dial of turbo-boost selector to "R" and look at exhaust waste gates. At sea level, or at altitudes slightly above sea level, the waste gates should be open or almost open when the engines are not running, even with the dial at "R"; but at higher altitudes, the waste gates will be closed when dial is turned to "R". Because of the ball guide key in the Pressuretrol AN connector, great care should be used to insure that the plug is properly matched with the receptacle when it is inserted.

Pressuretrol Connections.

Inspect pipe or duct which connects Pressuretrol to induction system. Check for leaks or cracks in hose and for loose clamps. A leak will result in erratic control and will introduce manifold pressure "hunting" at certain powers or altitudes.

Induction System.

Check for leaks in rubber couplings in induction system ducts. Also check gaskets between duct and turbo supercharger compressor housing. Inspect turbo air-intake duct for obstructions such as dirty filters. Check for loose or worn linkage on filter control gates.

MICRO
lock nut
adjuster
122D

RESTRICTED

Revised 28 Jan 1944

Use protective enclosures instead

archival
storage boxes



Try portfolio binders
or ...



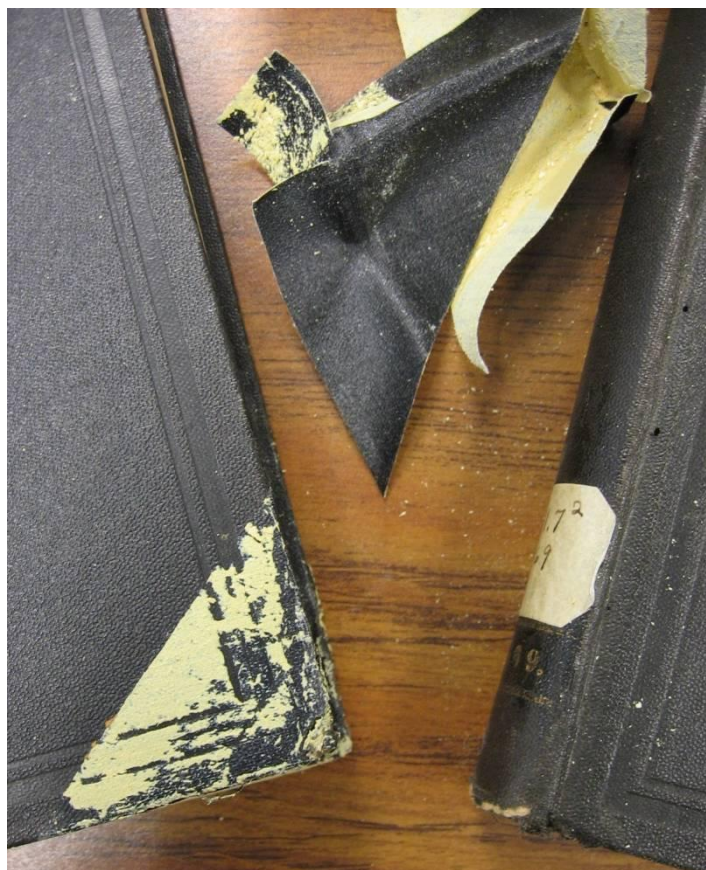
And hold the dressing!





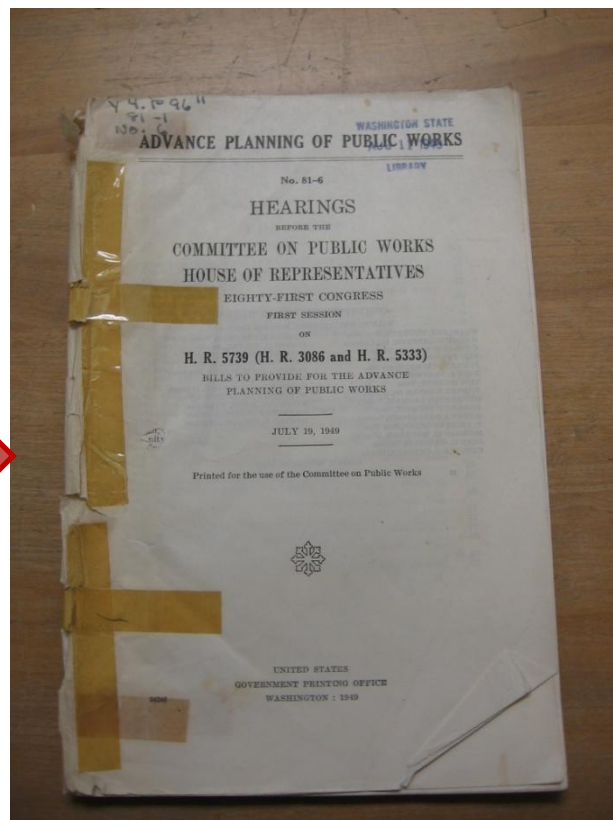
**Put on a
jacket
instead!**

When tape is a bad idea

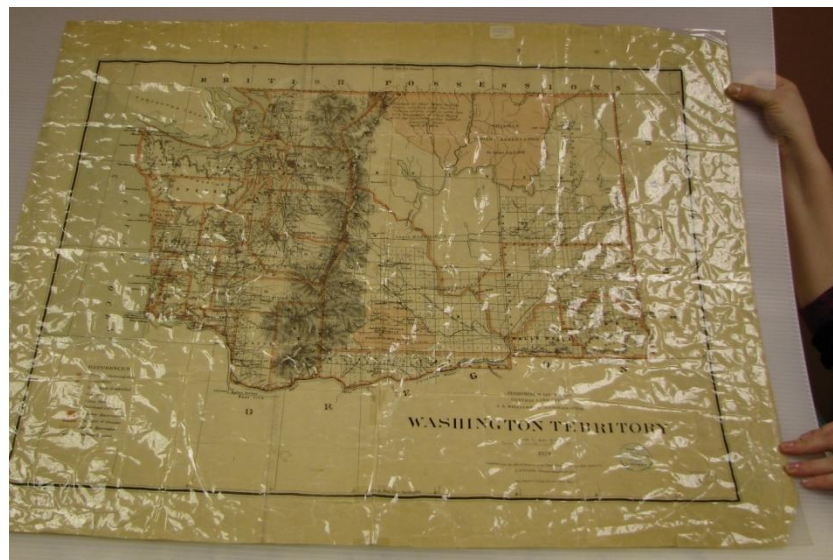


Corner protectors used on a rare book

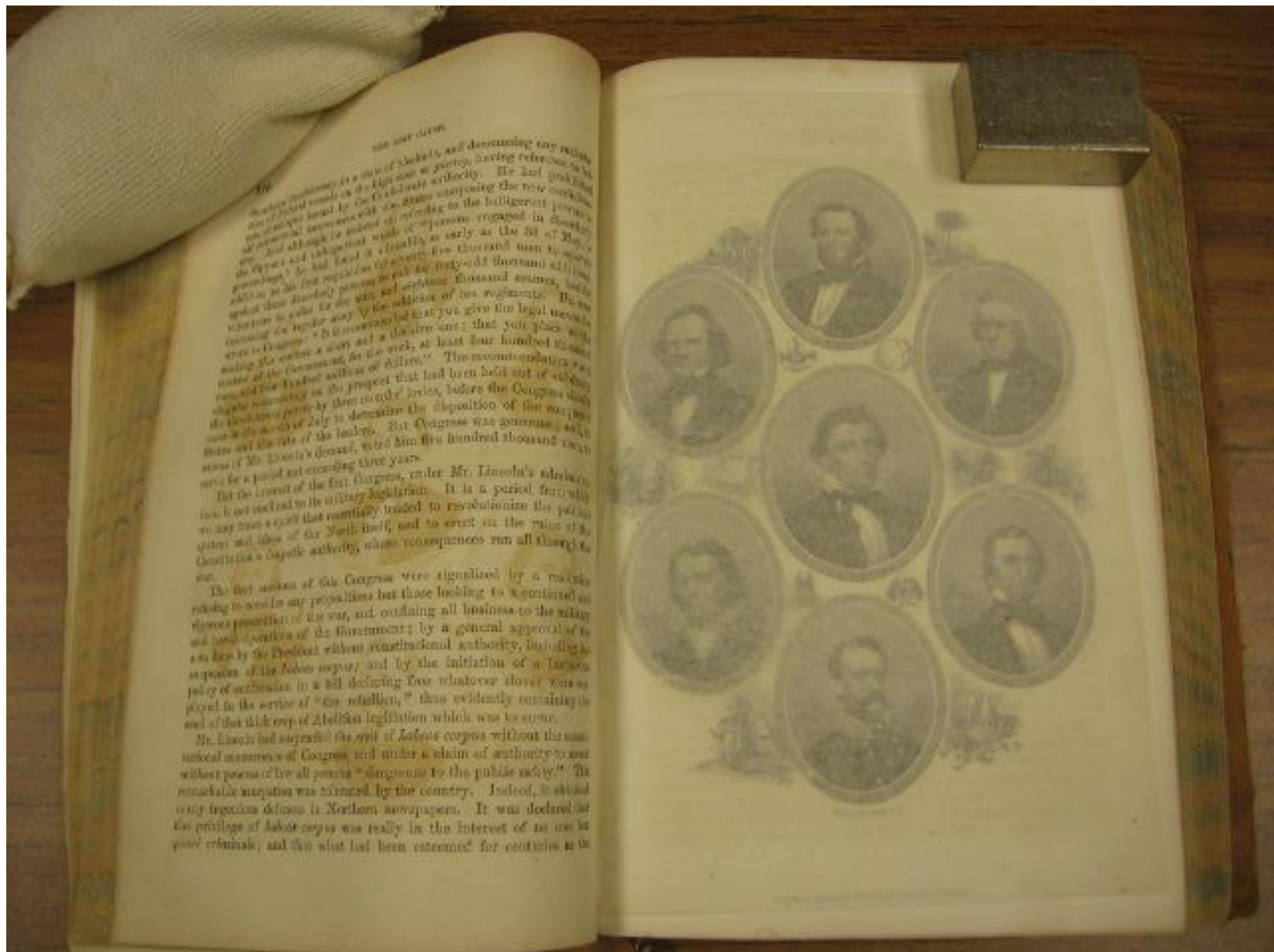
Cellophane tape used to repair tears in federal depository item



Book tape used to "lamininate" historic map



Acid migration



Does your book shed?



What is meant by “archival quality?”



www.nedcc.org/resources/leaflets/7ConservationProcedures/03RepairingPaperArtifacts.php



www.unfacilitated.preservation101.org/session5/expl-encl-preserv.asp

Got photos?



A sampling of suppliers:

Vendor	URL	Phone #
Archival Products	http://www.archival.com	1-800-526-5640
Bookmakers, Inc.	http://www.bookmakerscatalog.com/index.htm	1-301-345-7979
Custom Manufacturing Inc. (CMI) – phase boxes	http://www.archivalboxes.com	1-607-569-2738
Gaylord	http://www.gaylord.com	1-800-962-9580
Hollinger Metal Edge	http://www.hollingermetaledge.com	1-800-862-2228
Light Impressions	http://www.lightimpressionsdirect.com	1-800-828-6216
Museum Services Corporation	http://www.museumservicescorporation.com	1-651-450-8954
Talas	http://www.talasonline.com	1-212-219-0770
University Products	http://www.universityproducts.com	1-800-628-1912

**Should I
fix it
myself?**





**Don't do
something
you will
regret later!**

**WHAT
SHOULD I DO
WITH A ...**



Rare book?

First option:

find a conservator!

The screenshot shows the homepage of the American Institute for Conservation (AIC). The header includes the AIC logo and the text 'AMERICAN INSTITUTE FOR CONSERVATION OF HISTORIC AND ARTISTIC WORKS'. A search bar is located in the top right corner. The left sidebar contains a navigation menu with links to 'About Us', 'Resource Center', 'Member Center', 'Education', 'Annual Meeting', 'Grants & Scholarships', 'News', 'Publications', 'Career Center', and 'Specialty Groups'. Below this is a 'MEMBER LOGIN' section with fields for 'Email:' and 'Password:', a 'Forgot Your Password?' link, and a 'Login' button. The main content area features a 'RESOURCE CENTER' section with three images of lion sculptures. Below these images, the 'Find A Conservator' tool is highlighted with a red circle. The tool's description states: 'The tool provides a systematic, consistent method of obtaining current information to identify and locate professional conservation services from all across the United States and abroad. It allows you to address a wide range of conservation problems, whether your needs are long-range or short-term and whether your collection consists of thousands of valuable historic artifacts, one priceless work of art, or items of great personal value.' Below the description is a link to 'How to Select a Conservator' and another link to 'Conservation Terminology'. The 'FAST FACTS' section on the left states: '59% of collecting institutions have had their collections damaged by light.' and provides a source: 'Source: A Public Trust at Risk: The Heritage Health Index Report on the State of America's Collections 10/16 2005 Heritage Preservation, Inc. More information at www.heritagehealthindex.org'. The 'FOLLOW US ON TWITTER' section is also present. The right sidebar contains a 'FIND A CONSERVATOR' button, an 'ANNUAL MEETING' section with links to 'Register', 'Present a Paper', 'Plan Your Visit', 'Exhibit with Us', and 'Past Meetings', a 'CALENDAR' section with a 'View All Events' link, an 'ONLINE STORE' section with a 'Find out more' link, and two advertisements: 'Optimum* Conservation Grant Program' and 'Air Infiltration Removal Systems'.

AIC AMERICAN INSTITUTE FOR CONSERVATION OF HISTORIC AND ARTISTIC WORKS

SEARCH **ADVANCED SEARCH**

Find A Conservator

The tool provides a systematic, consistent method of obtaining current information to identify and locate professional conservation services from all across the United States and abroad. It allows you to address a wide range of conservation problems, whether your needs are long-range or short-term and whether your collection consists of thousands of valuable historic artifacts, one priceless work of art, or items of great personal value.

Before you use the tool, you may want to read our guide on [How to Select a Conservator](#)

You may also want to familiarize yourself with some [Conservation Terminology](#)

Step 1: Select the Type of Conservation

Please select one speciality from the options below. You will also be able to select sub-specialties if you choose to narrow your search.

Architecture
Immovable properties such as buildings and monuments.
[Start Search](#) | [View More Info](#)

Book & Paper
Paper materials including art on paper, books, manuscripts, and library material.
[Start Search](#) | [View More Info](#)

Electronic Media
Records and works that involve electronic equipment, technologies, and media.
[Start Search](#) | [View More Info](#)

Objects
Archaeological and ethnographic objects, decorative arts, outdoor sculpture, etc.
[Start Search](#) | [View More Info](#)

Paintings
Paintings in oil, acrylic, or mixed media, etc... & their supports, coatings and varnishes.
[Start Search](#) | [View More Info](#)

Photographic Materials
Media in film & composite objects like paper prints and albums.
[Start Search](#) | [View More Info](#)

Textiles
Clothing, tapestries, embroidery, flags, quilts, archaeological fragments.
[Start Search](#) | [View More Info](#)

Wooden Artifacts
Ethnographic carvings, furniture, upholstery, frames, and veneer/marquetry/boulle.
[Start Search](#) | [View More Info](#)

FAST FACTS

59% of collecting institutions have had their collections damaged by light.

Source: A Public Trust at Risk: The Heritage Health Index Report on the State of America's Collections 10/16 2005 Heritage Preservation, Inc. More information at [www.heritagehealthindex.org](#)

FOLLOW US ON TWITTER

FIND A CONSERVATOR

ANNUAL MEETING

- Register
- Present a Paper
- Plan Your Visit
- Exhibit with Us
- Past Meetings

CALENDAR

ONLINE STORE
[Find out more](#)

Optimum* Conservation Grant Program
Up to \$4,000 plus Optimum Acrylic Glazing
[CLICK HERE](#)
For Grant Information
Optimum
Acrylic Glazing

Air Infiltration Removal Systems
Providing Solutions For Your Air Quality Needs
[View More Info](#)

- Chemical Fumes
- Dust
- Ozone
- Various airborne pollutants

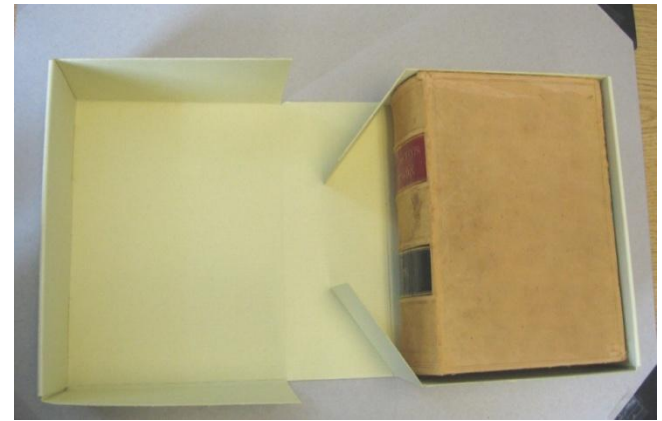
www.conservation-us.org

Second option: Box it!

Before:



After:



Third option:

**Cotton or
linen tape or
polyester
strap**

**Do not use
on brittle
materials!**



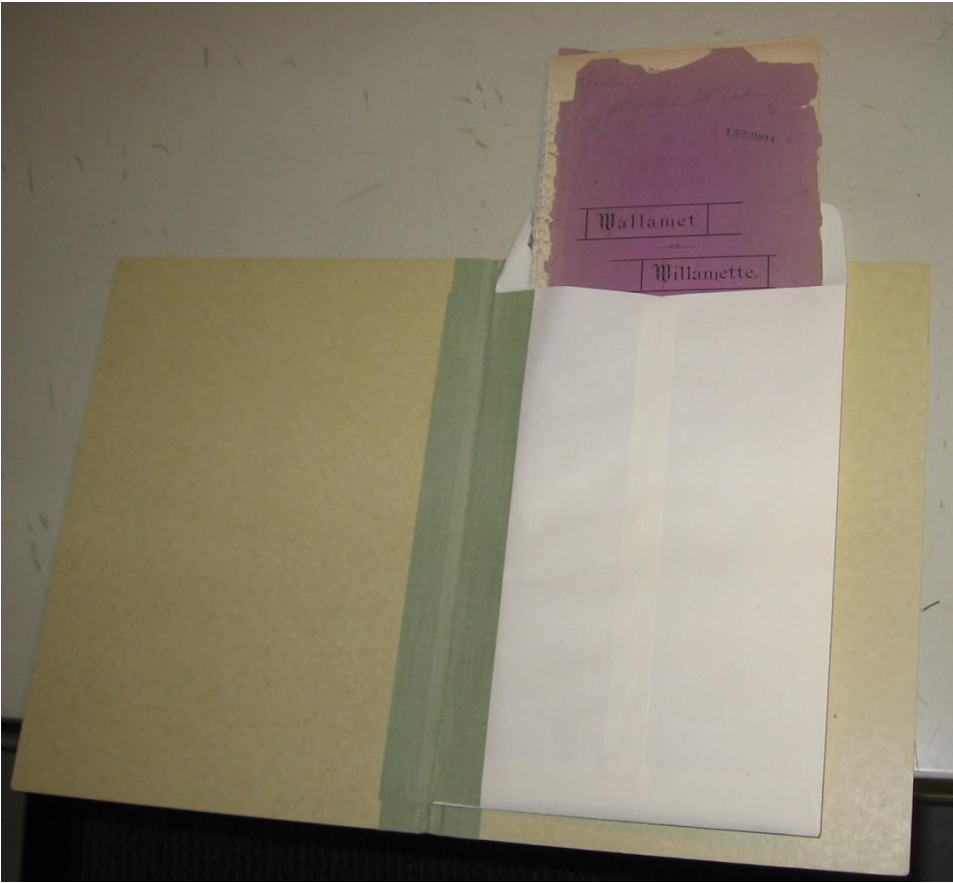
**Fourth
option:**

**Wrap in
acid-free,
lignin-free
tissue**

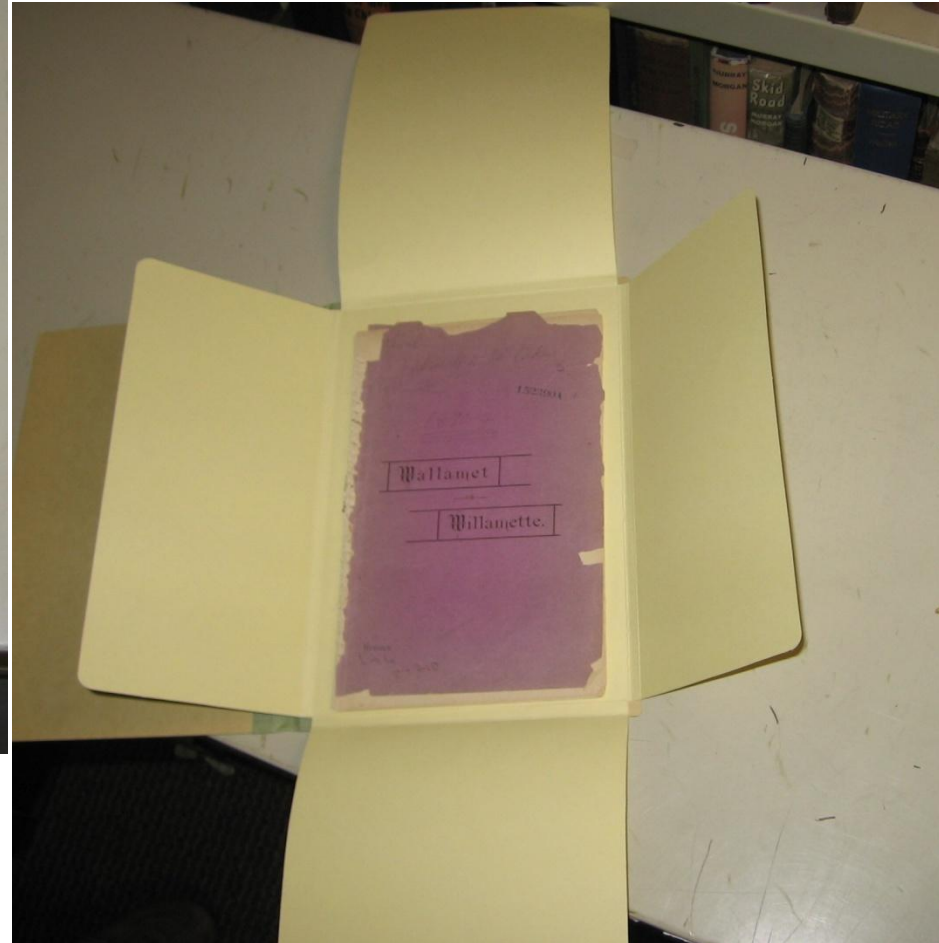


Brittle rare journal or pamphlet?

A portfolio binder will protect
↓ the item from further damage



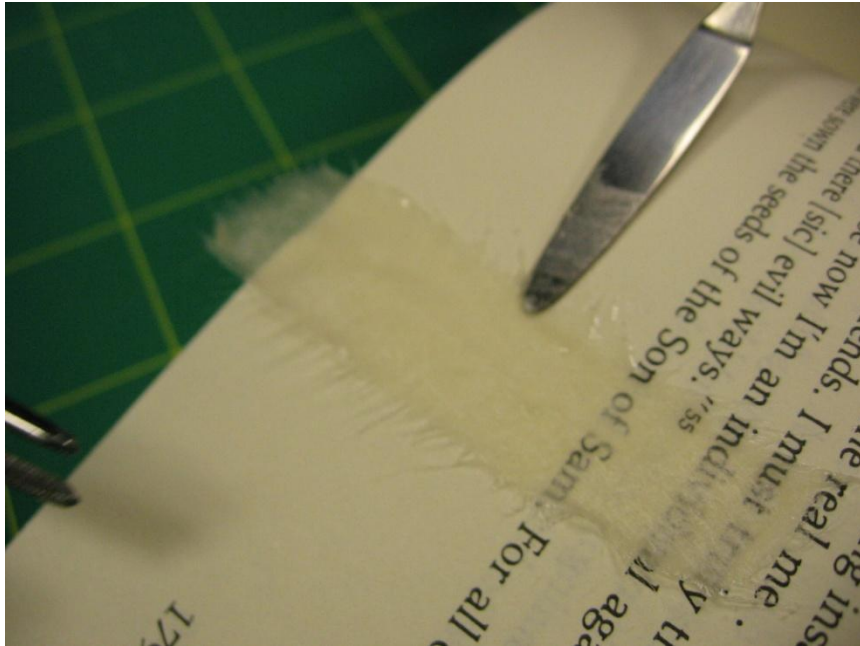
An envelope enclosure will
make the problem worse



**Never
use
twine or
rubber
bands!**



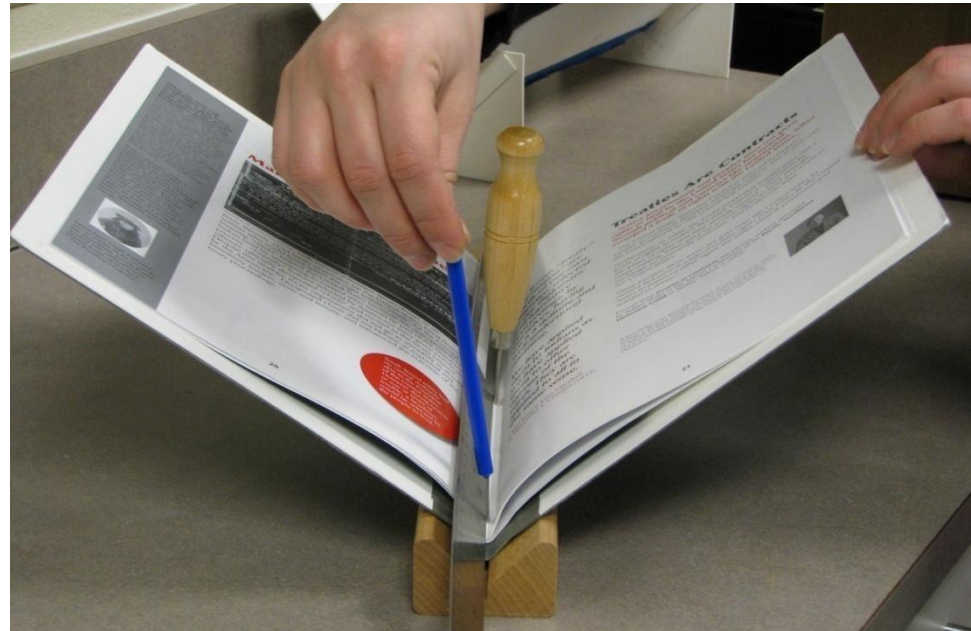
Non-brittle rare journal or pamphlet?



1. Mend any tears with Japanese tissue and wheat paste.



2. Sew into pamphlet binder.



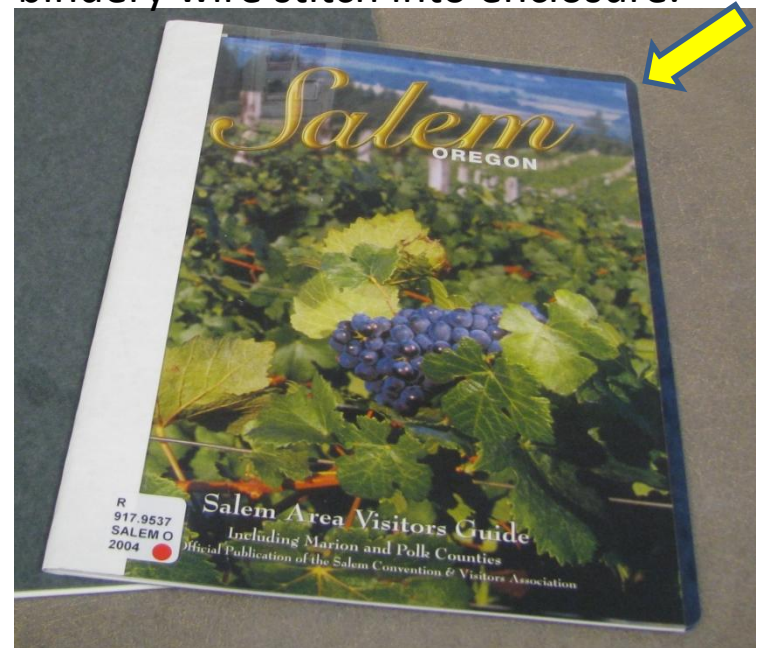
Non-rare journal or pamphlet?



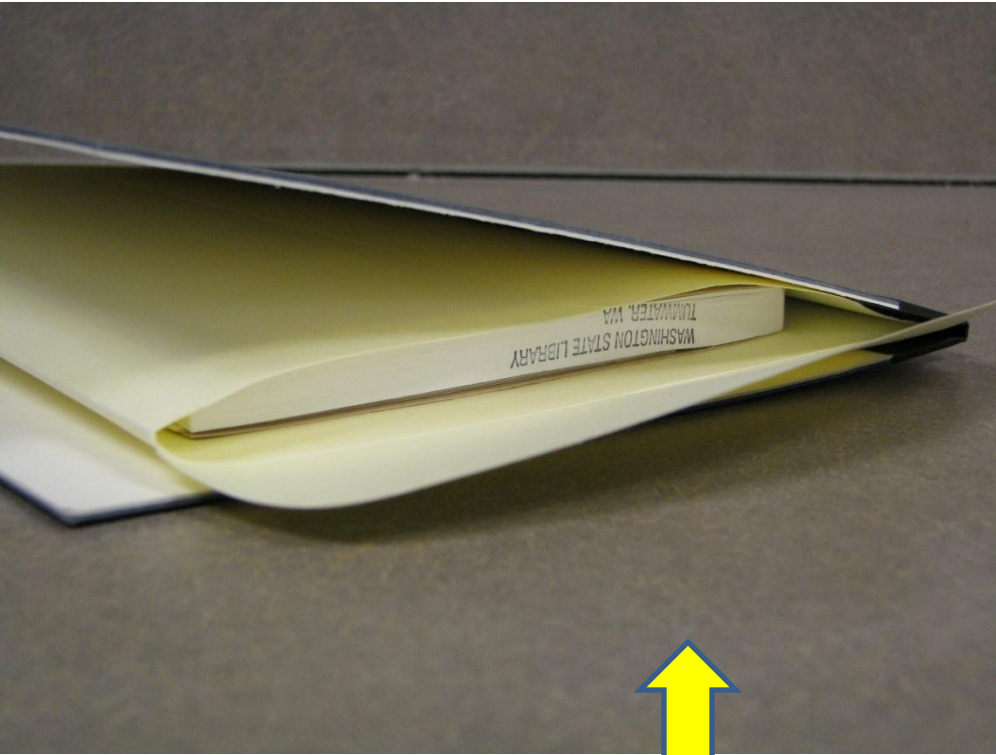
1. Mend any tears with document repair tape.



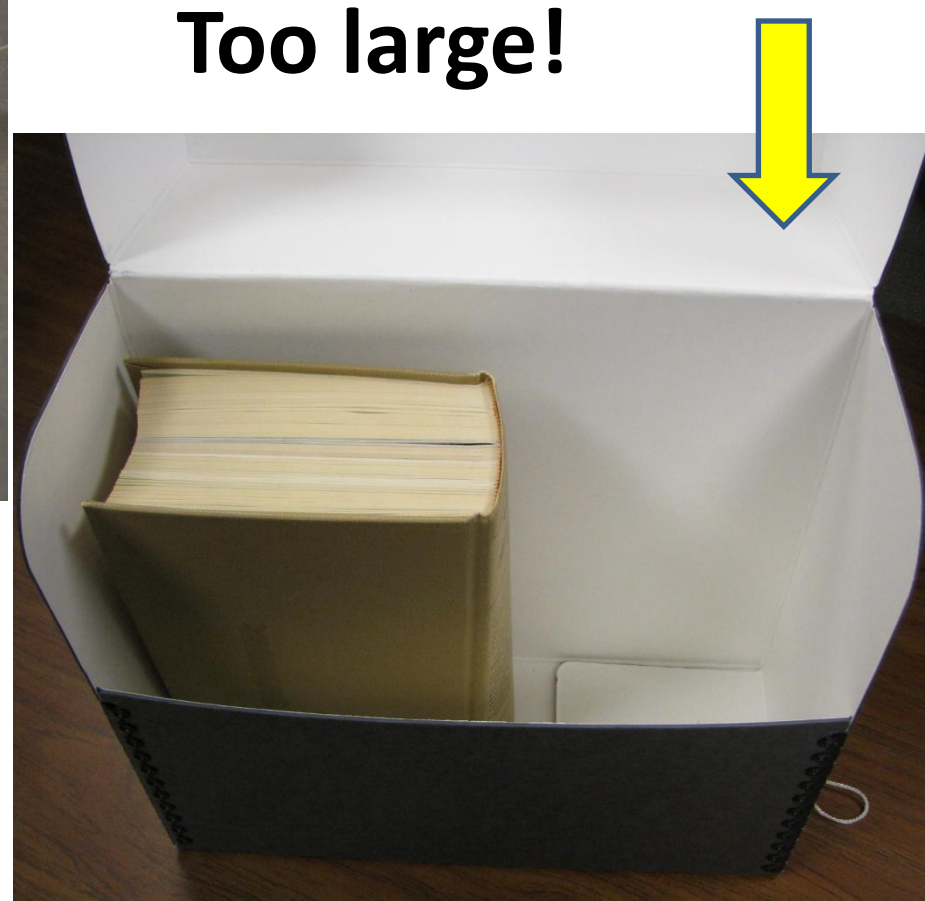
2. Staple into binder or have LBI bindery wire stitch into enclosure.



Make sure it fits!



Too small!

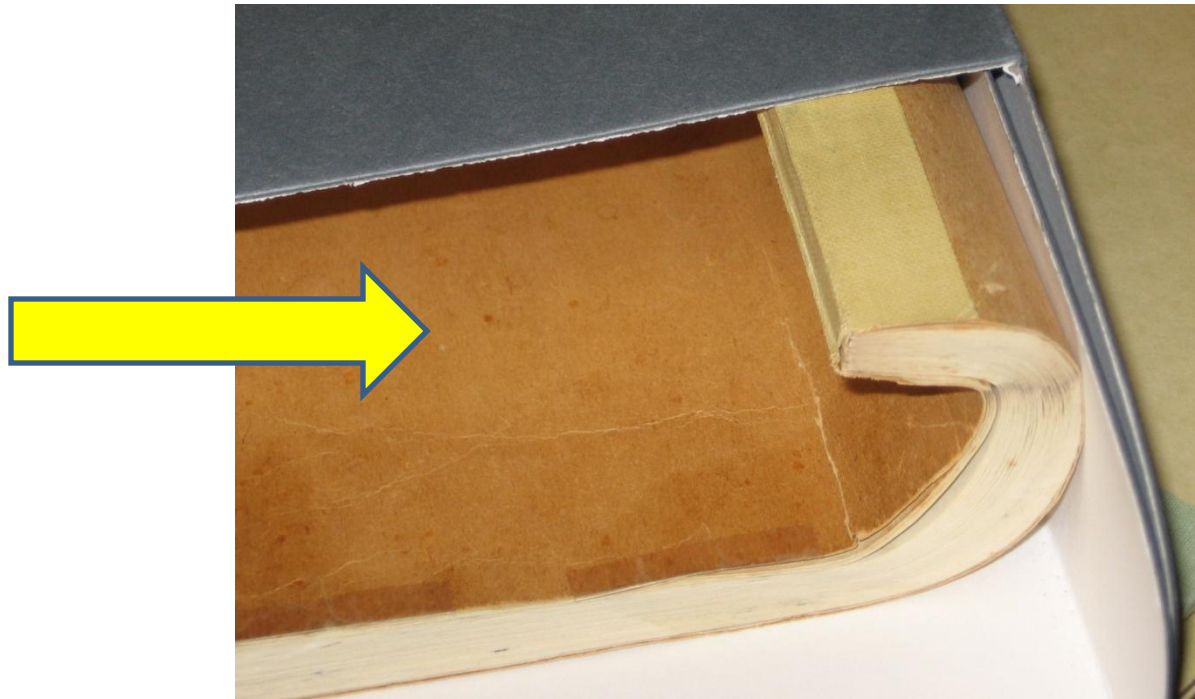


Too large!



**This enclosure
was so large ...**

**the material
inside became
damaged.
Note the “curl.”**



What about a map, blueprint, broadside, sheet music, etc. (aka flat file)?

Wrong way!



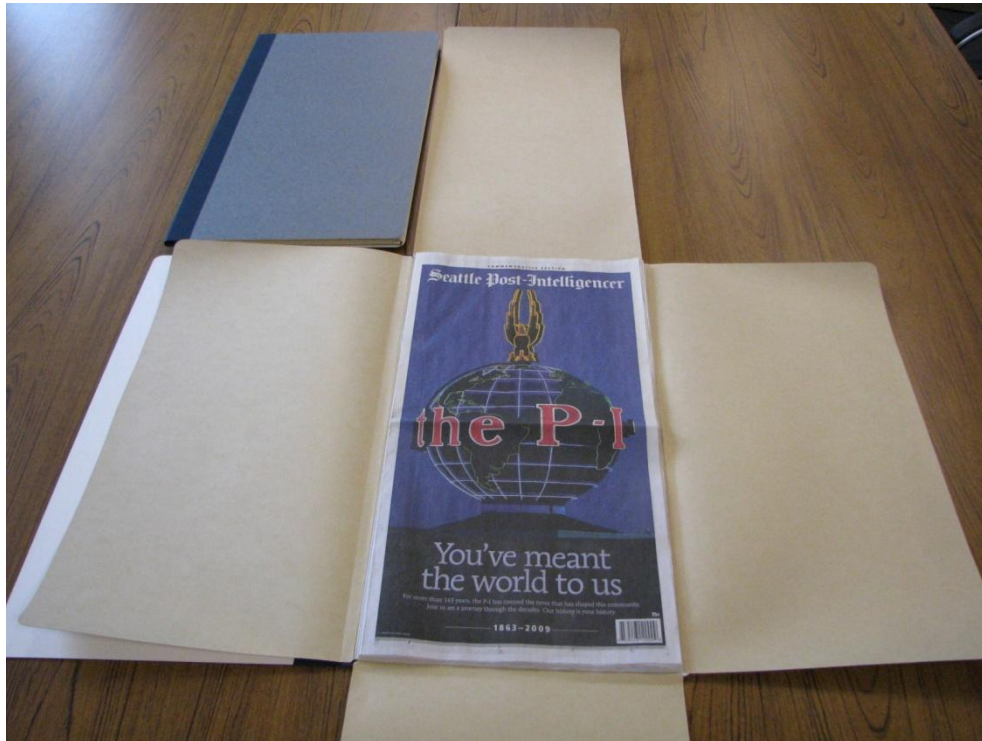
Right way!



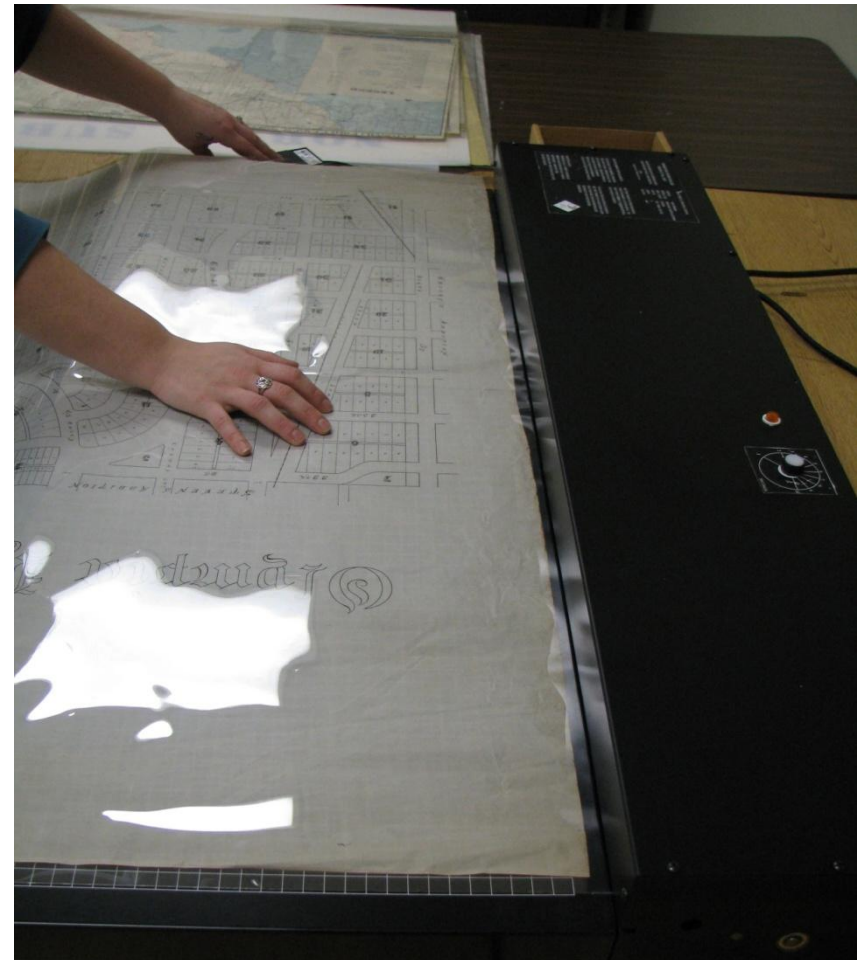
Flat file enclosure choices

Acid-free, lignin-free folder
and/or...

Portfolio binder and/or ...



Encapsulate in polyester
(Melinex® 516 aka Mylar)



[illegible]

You, too, can encapsulate!



www.nps.gov/history/museum/publications/conserveogram/13-03.pdf



What about friable materials?



<http://www.cci-icc.gc.ca/crc/notes/html/11-10-eng.aspx>

What about cyanotypes, blueprints, and ... ?



www.nps.gov/museum/publications/conserveogram/19-09.pdf

When do it yourself is not a good idea



Rare,
historically
significant, or
valuable
materials

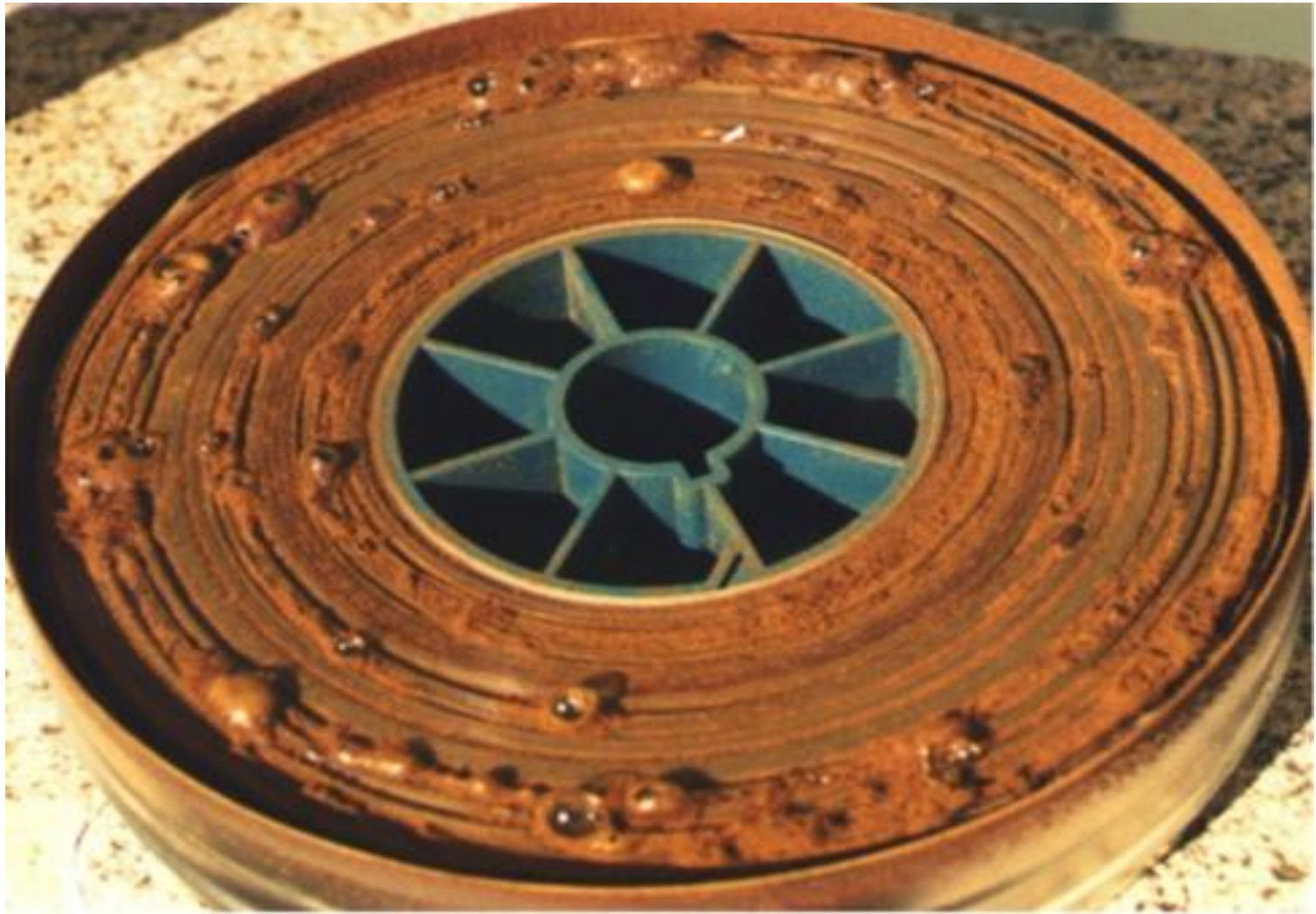


**Leave
photographs to
the experts!**

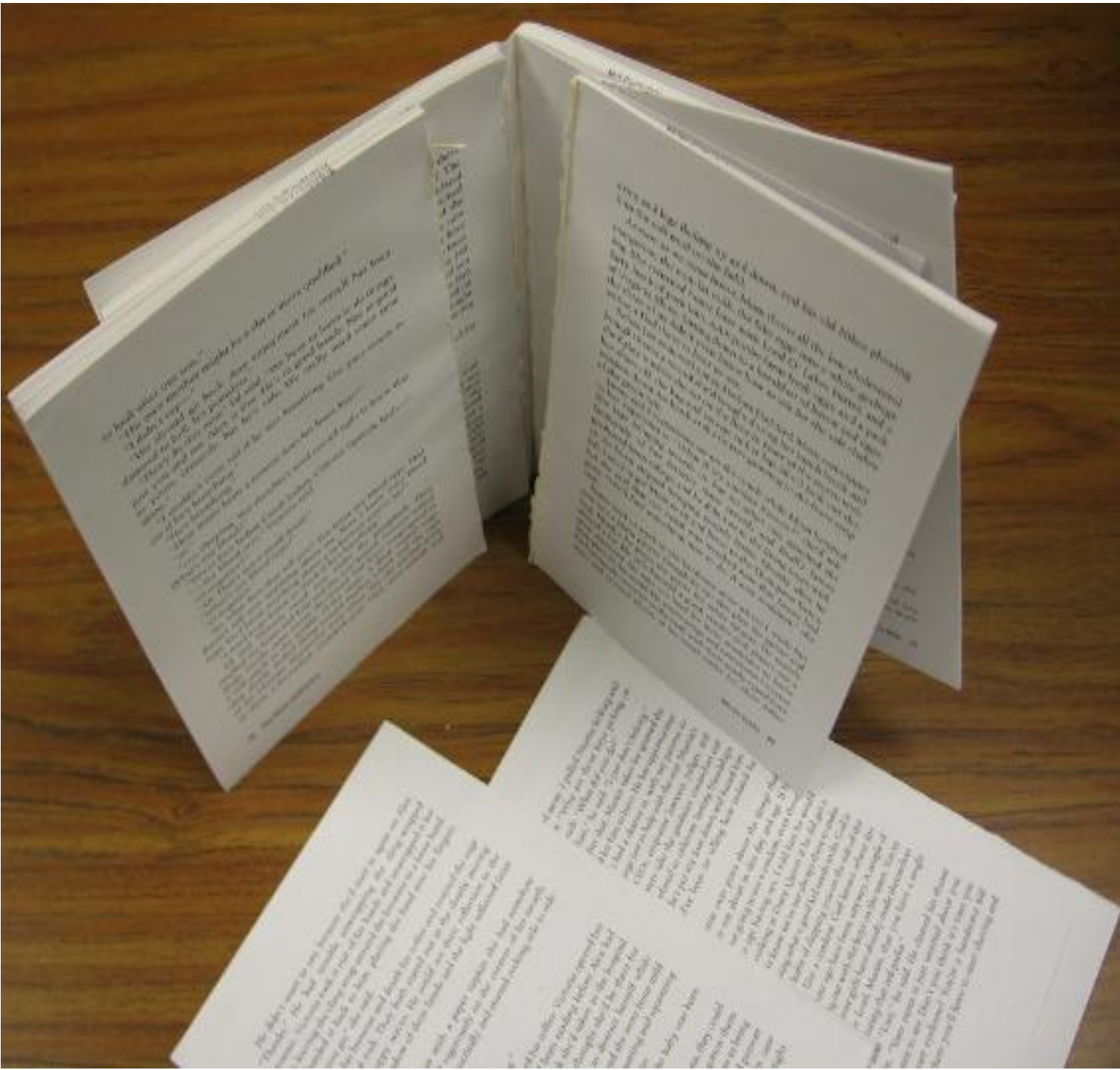


From Augustus Washington Daguerreotypes, American Colonization Society collection Daguerreotypes, Library of Congress.

Watch out for cellulose nitrate film—it can be deadly!



www.nps.gov/history/museum/publications/MHI/AppendM.pdf



The perfect binding!?!

Need help?





American Institute for Conservation of Historic and Artistic Works (AIC)

www.conservation-us.org

NISO Standards

A low-angle, blue-tinted photograph of industrial machinery, likely a paper mill. The image shows large, light-colored rollers or sheets of material being processed by a complex system of pipes, valves, and structural frames. The perspective is looking up at the machinery, creating a sense of scale and industrial complexity.

www.niso.org/kst/reports/standards

National Park Service



Conserve O Grams
Technical Leaflet Series

[www.nps.gov/history/museum/
publications/consereogram/cons_toc.html](http://www.nps.gov/history/museum/publications/consereogram/cons_toc.html)

Northeast Document Conservation Center (NEDCC)

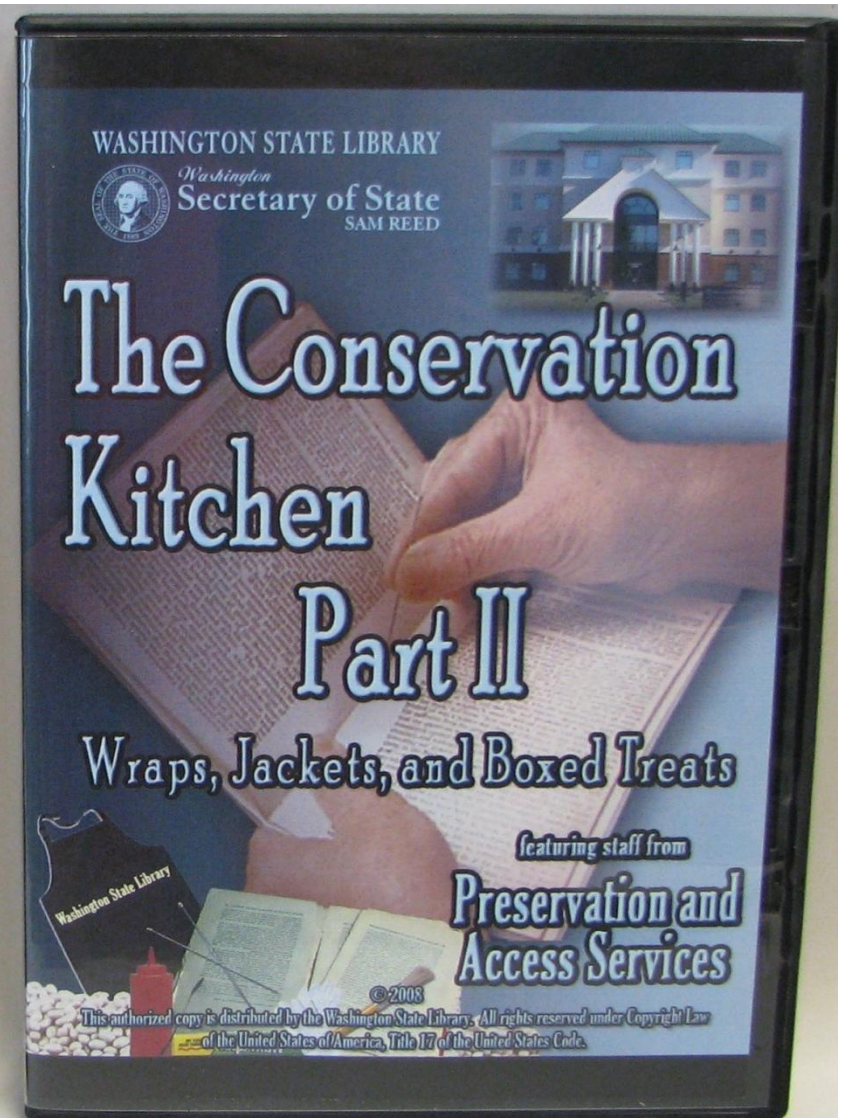
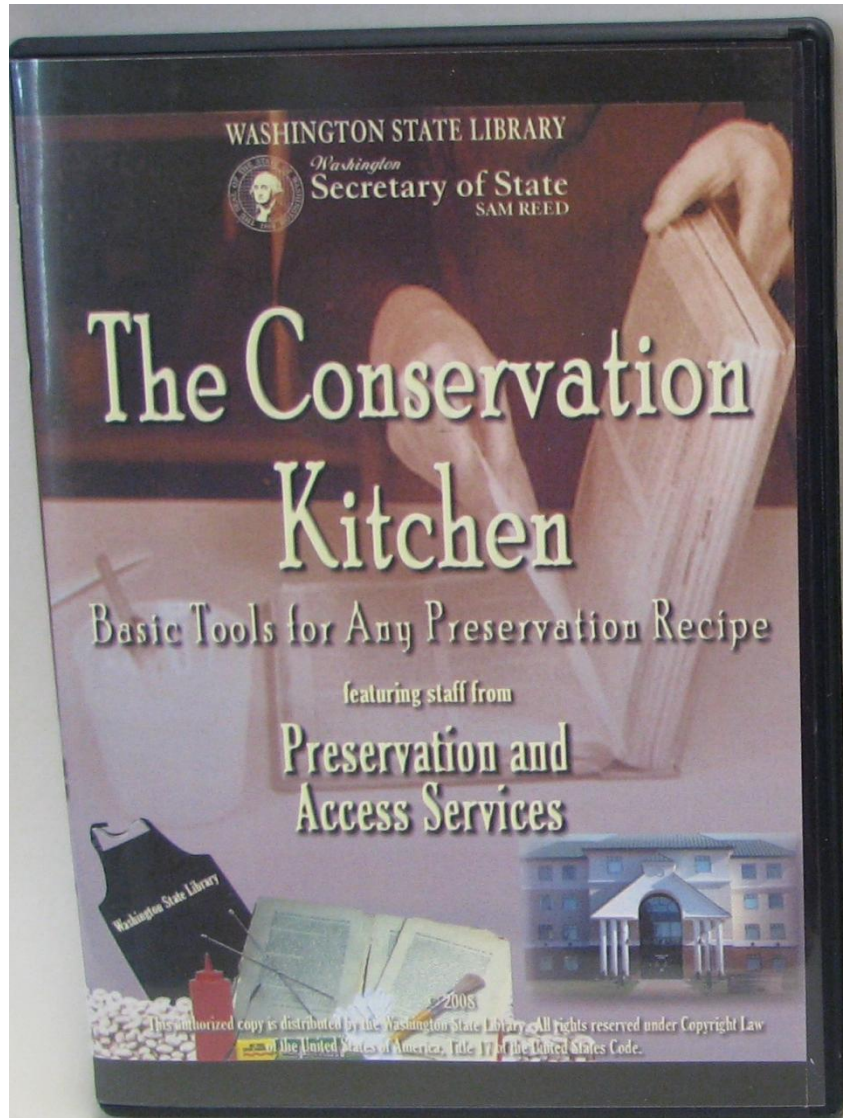
www.nedcc.org/home.php




Handy how-to Web sites:



Conservation Kitchen series: borrow DVDs from WSL, ...




Watch streaming media, or...



Enter Keywords

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The Conservation Kitchen - Video Presentations & Handouts

The Conservation Kitchen Part I - Basic Tools for Any Preservation Recipe

- [Chapter 1](#)
- [Chapter 2](#)
- [Chapter 3](#)

The Conservation Kitchen Part II - Wraps, Jackets, and Boxed Treats

- [Chapter 1](#)
- [Chapter 2](#)
- [Chapter 3](#)

Handouts

- [Conservation Kitchen - First Tuesday Presentation](#)
- [Conservation Kitchen - Repairs](#)
- [Conservation Kitchen - Supplies](#)
- [Conservation Kitchen - Preservation Websites](#)
- [Conservation Kitchen - Book Repair Bibliography](#)
- [Conservation Kitchen - IMLS Bookshelf](#)
- [Conservation Enclosures](#)
- [Conservation Supplies for Enclosures](#)
- [Some Sources for Enclosure Supplies](#)

www.sos.wa.gov/library/conservation_kitchen.aspx

Enjoy the PowerPoint slides, chat, and audio on Opal GPO!

GPO20090528 - Windows Internet Explorer

http://www.opal-online.org/GPO20090528/

File Edit View Favorites Tools Help

GPO20090528

Page Tools

DON'T FORGET THE BEESWAX!

- Run your thread through beeswax before you begin sewing. It will help to ease the thread through the paper!




29:04 34:06

Press "/" to pause or play. Press the period key to fast forward and the comma key to rewind.

Text Chat Area

www.opal-online.org/archivegpo.htm

Or visit the WLMA/WALE 2010 Conference Wiki for today's handouts

**WLMA/WALE 2010**
Conference Wiki

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ConcurrentSession4-Fri
ConcurrentSession5-Sat
ConcurrentSession6-Sat
ConcurrentSession7-Sat

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edit navigation

The page has been updated.


RecipesForDisaster Page Discussion History Notify Me EDIT


[Connecting to Collections Free Webinars](#)
 [Recipes_For_Disaster_Slides_and_Notes.pdf](#)

<http://wlma2010.wikispaces.com/RecipesForDisaster>

Recipes for Disaster


Knowing how to prevent damage to library materials can save money, staff time, and heartache in an age of shrinking resources. "Recipes for Disaster" provides the basics of collection care, including what not to do, to extend the life of library collections. This session is part of the 'Conservation Kitchen' series from the Washington State Library
Diane Hutchins, Washington State Library

Handout:  [Quick Preservation Tips - print.pdf](#)



Diane Hutchins shows what not to do to your collections!

pass it on...



Preservation
April 24-30, 2011 **Week**
www.ala.org/preservationweek

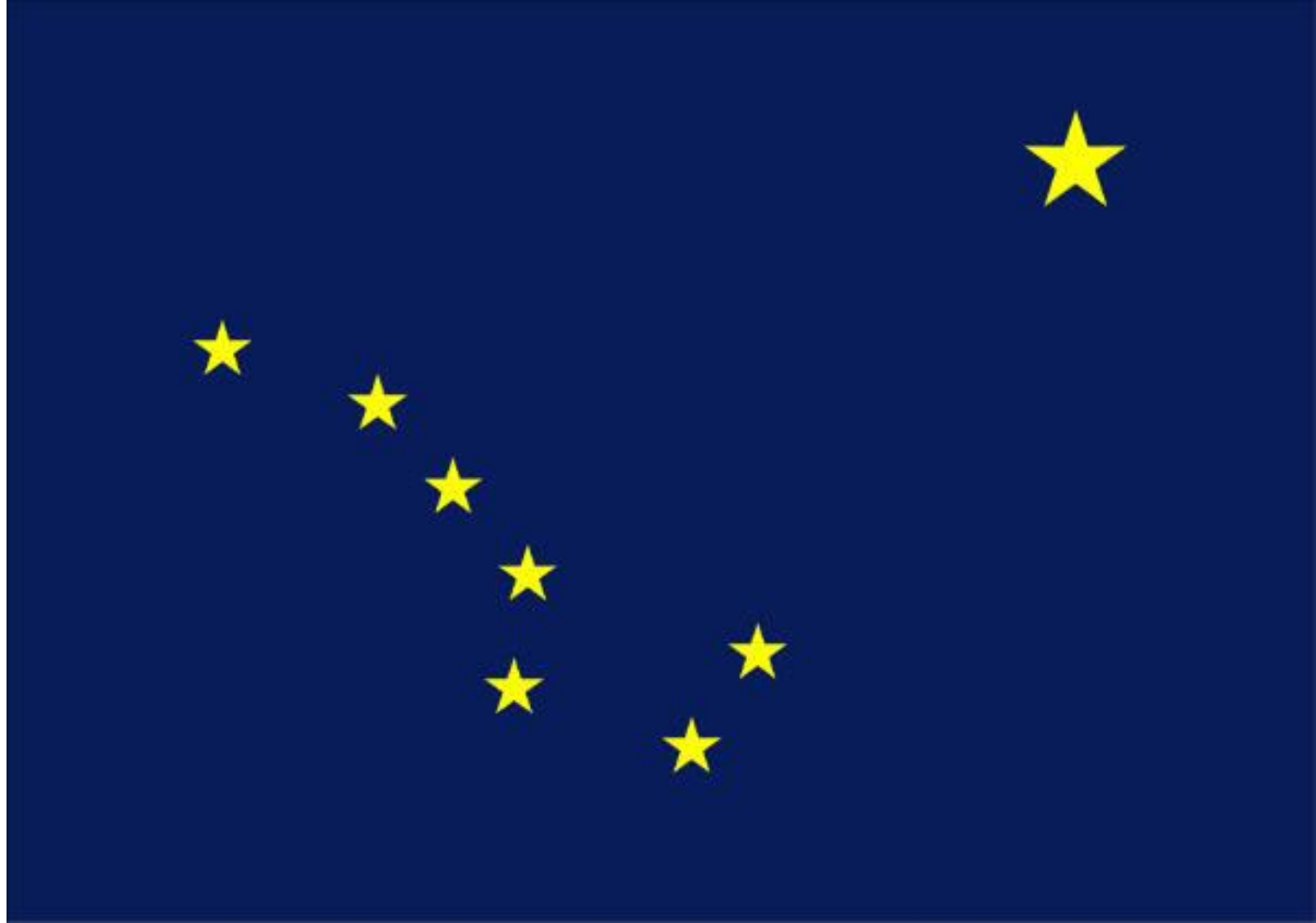
Dartmouth University

“A Simple Book Repair Manual”



www.dartmouth.edu/~library/preservation/repair/index.html

Alaska State Library



**“Conservation Book Repair: A training manual” by
Artemis BonaDea**

www.library.state.ak.us/hist/conman.html

Indiana University

[www.indiana.edu/~libpres
/manual/mantoc.html](http://www.indiana.edu/~libpres/manual/mantoc.html)

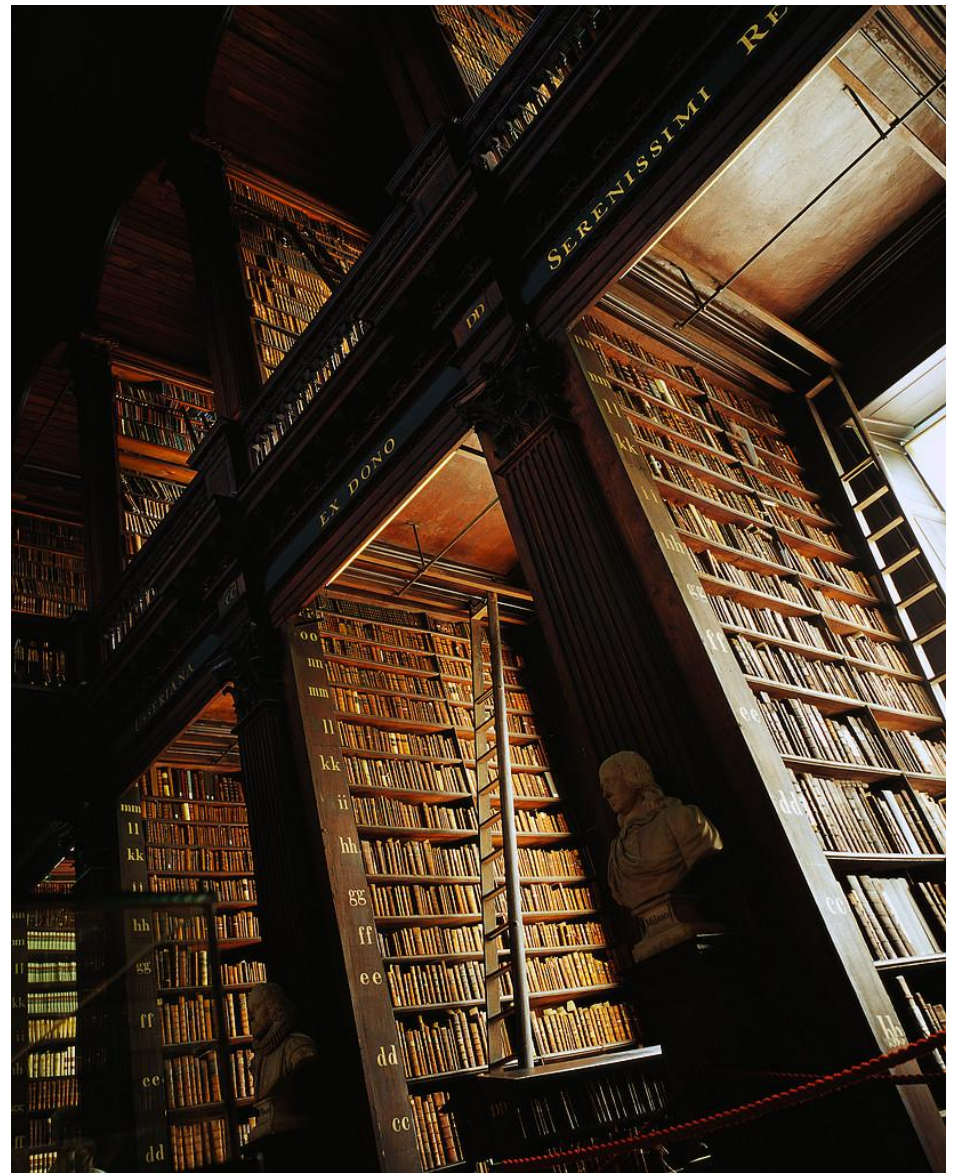




Caring for family treasures

Cornell University

“Preserving Books in Your Home Library”



www.library.cornell.edu/preservation/publications/PreservingBooks.pdf

Library of Congress



www.loc.gov/preserv/familytreasures/index.html

National Archives

www.archives.gov/preservation/family-archives/



Northeast Document Conservation Center (NEDCC) “Hints for Preserving Family Collections”



<http://www.nedcc.org/resources/resources.php>

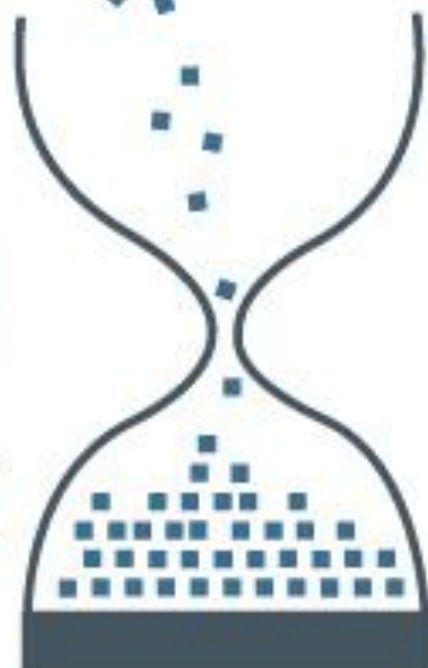
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Questions?



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