



Eight Days a Week:
Preservation Planning and Advocacy



Mike Mitchell, Feb. 11, 1964 at Washington Coliseum, Silver Gelatin Photograph

PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Eight Days a Week:
Preservation Planning and Advocacy



Images courtesy of the Kamran Najafzadeh Collection, Iran


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Preservation Planning and Advocacy



PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

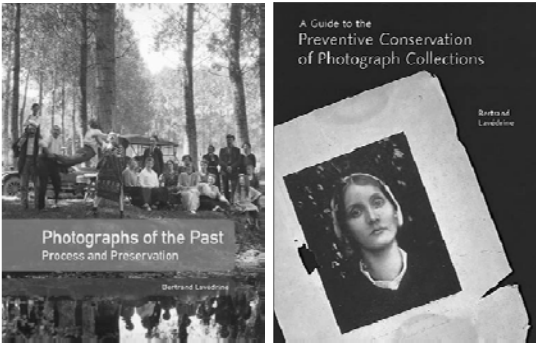
Eight Days a Week:
Preservation Planning and Advocacy



HBCU Photograph Preservation Institute, Image from Evan Krape, University of Delaware

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Photographic Conservation Resources



Photographs of the Past Process and Preservation
Barthelme, London


A Guide to the Preventive Conservation of Photograph Collections
Barthelme, London

https://www.imagepermanenceinstitute.org/webfm_send/302

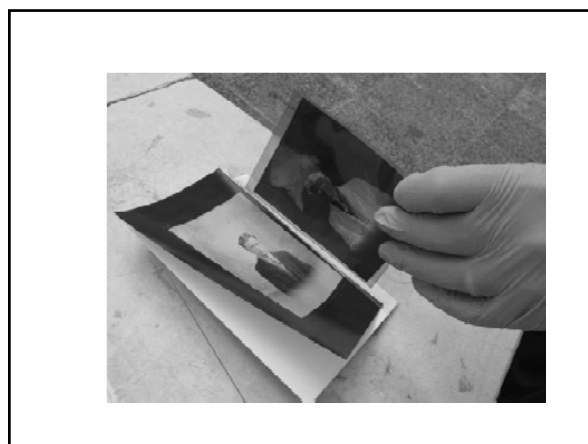


Photographic Negatives
Nature and Evolution of Processes

By María Fernanda Valverde




<http://www.connectingtocollections.org/courses/caring-for-photographs/>



Assess Collection Needs & Demonstrate Thoughtful Planning

- Identify urgent needs
- Prioritize
- Focus on strength
- Involve experts




Frederick Langenheim,
Frederick Langenheim Looking at Talbotypes
Daguerreotype
Dimensions: 4 3/4 x 3 1/2, Case: 6 x 4 11/16 x 5 5/8 Gilman
Collection, The Metropolitan Museum of Art

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ESTABLISH PRIORITY *for* PRESERVATION

- Level of access




Kappler, Victor. *Housewife in Kitchen*
color print, assembly (Cibachrome) process
George Eastman House
77.0292.0011

PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

ESTABLISH PRIORITY *for* PRESERVATION

- Level of access
- Type & format




Emily Brown, Art Conservation Fellow, Winterthur/UD Program in Art Conservation

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ESTABLISH PRIORITY *for* PRESERVATION

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Glass Plate Negative Private Collection, Iran

Albumen Photographs, Carte-de-visites, Private Collection

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ESTABLISH PRIORITY *for* PRESERVATION

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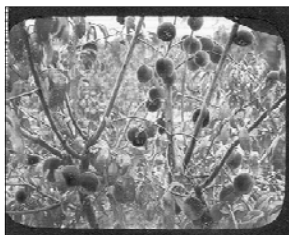


Helen Medici (Nana) and Debra Prima
Norris 1957, Kodachrome

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Lantern Slide
Schooner, Elizabeth City NC
North Carolina State Museum of Natural Sciences
Raleigh, NC



Lantern Slide
Tree Fruits, Carmen Peach, Moore Co. NC
North Carolina State Museum of Natural Sciences
Raleigh, NC

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Private J. M. Strasburg, Company A, 96th Regiment, Ohio Volunteers
General Commission on Archives and History
The United Methodist Church
Madison, NJ



Public Library of Cincinnati and Hamilton County
Cincinnati, OH

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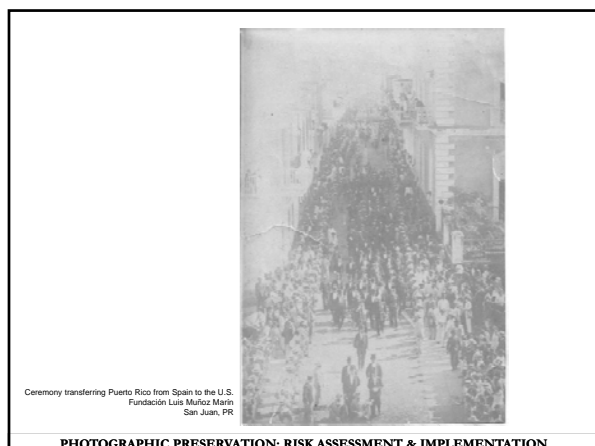
P. Bernabae Portrait
Our Lady of Guadalupe Province
Office of Archives
St Michaels, AZ

PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION



Shaft Guards at Thurber Coal Camp, under Capt. Wm. Lightfoot, July, 1894
Dick Smith Library
Tarleton State University
Slaterville, TX

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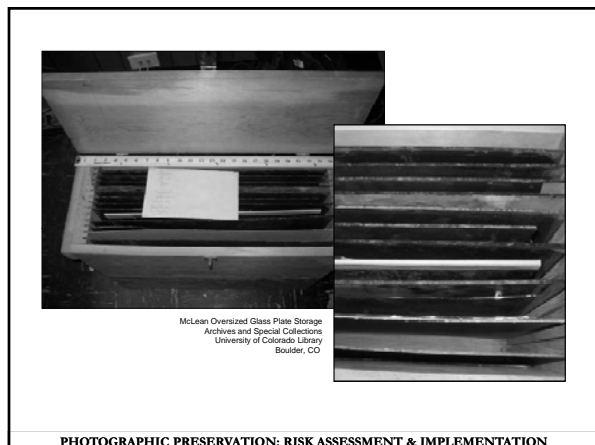


PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

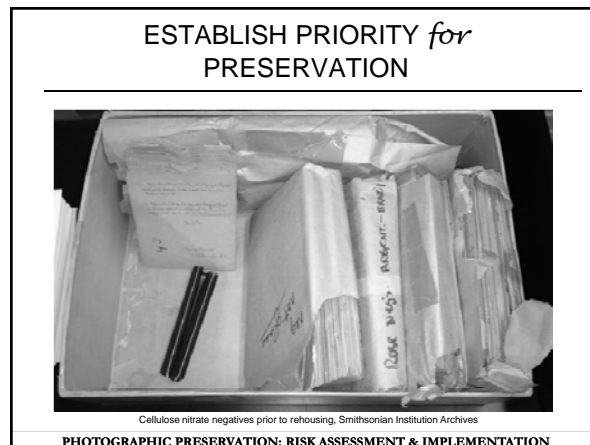
ESTABLISH PRIORITY *for* PRESERVATION

- Level of access
- Type & format
- Level of physical protection

PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION



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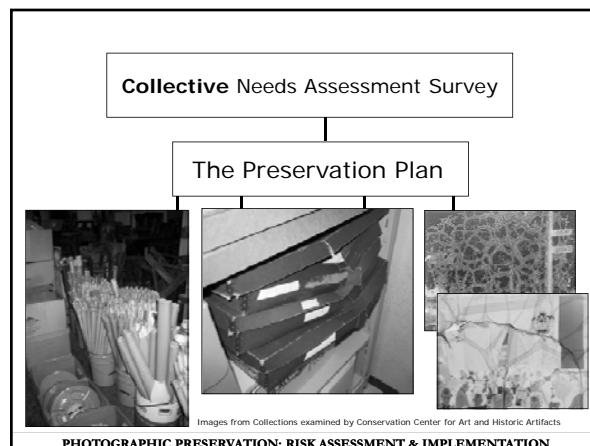
PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

ESTABLISH PRIORITY *for* PRESERVATION

- Level of access
- Type & format
- Level of physical protection
- Value to institution

Museum of Photography, Bahrain

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Generic Preservation Planning for Photographic Collections

1. Environmental assessment and incremental control

- 30% - 50% RH
- 68°F (40°F or below for color)
- Low temperature and low humidity for nitrate & acetate film



National Center for Documentation and Research, Abu Dhabi, UAE

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IPI Media Storage Guide

- Information in short and accessible format
- Information on materials and preservation issues
- Addresses needs for mixed media



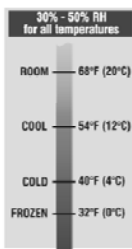
<https://www.imagepermanenceinstitute.org/store/media-preservation/media-storage-quick-reference>

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IPI Media Storage Guide

Table 1: The types of decay that threaten media, the media that are affected, and recommended storage environments.

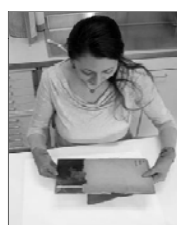
TYPE OF DECAY	MEDIA	RECOMMENDED ENVIRONMENT
SILVER IMAGE DECAY	Photographic glass plates Black-and-white film Black-and-white photographic prints	30% to 50% RH
COLOR IMAGE DECAY	Color film Color photographic prints ink jet prints	Low temperature 30% to 50% RH
COLOR BLEEDING	ink jet prints	30% to 50% RH
YELLOWING, STAINING	Color photographic prints inkjet prints	Low temperature 30% to 50% RH
BINDER DEGRADATION	Magnetic tapes	Low temperature 30% to 50% RH
NITRATE DECAY	Nitrate-based film	Low temperature 30% to 50% RH
ACETATE DECAY	Acetate-based black-and-white film Acetate-based color film Acetate-based magnetic tapes	Low temperature 30% to 50% RH
GLASS DEGRADATION	Photographic glass plates	30% to 50% RH
LAYER SEPARATION	Photographic glass plates CDs and DVDs	Medium temperature and RH 30% to 50% RH
MOLD	All media	30% to 50% RH



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Generic Preservation Planning for Photographic Collections

2. Preparation of handling and housekeeping guidelines and an emergency plan



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Generic Preservation Planning for Photographic Collections



PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Exhibition Guidelines

- Evaluate process
- Evaluate exhibition conditions
 - Light type and levels
 - Duration of exhibition
 - Environmental conditions
 - Method of presentation



Richard Avedon: Portraits September 26, 2002–January 5, 2003
The Metropolitan Museum of Art

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Exhibition Guidelines

• Kinds of lights available:

- Fiber optic
- LED
- Fluorescent
- Incandescent



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Exhibition Guidelines

• Lighting Tips:

- Duration: 3-6 months is normal, 9 months is considered long
- Intensity: 5 foot-candles (50 LUX) max for sensitive materials
- Sensitivity: assume all photographs are light-sensitive
- Wavelength: UV (i.e. daylight) is more destructive than other kinds of light

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http://www.loc.gov/preservation/care/light.html

PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

http://www.ccaha.org/hbcu

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Photography: Component Parts

Support

(paper, glass, iron, silver plated copper, plastic, textile, leather, wood and more)

Photography: Component Parts

Binder

(albumen, collodion, gelatin)

Support

(paper, glass, iron, silver plated copper, plastic, textile, leather, wood and more)

Photography: Component Parts

Final Image Material

(silver organic dyes, pigments, platinum, gold, iron salts)

Binder

(albumen, collodion, gelatin)

Support

(paper, glass, iron, silver plated copper, plastic, textile, leather, wood and more)

Effect of Visible and UV Light on Photographs



Portrait of Garrett Davis, Smithsonian Institution Archives;



Portrait of J. D. Dana, Smithsonian Institution Archives;

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Effect of Visible and UV Light on Photographs



PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Effect of Visible and UV Light on Photographs



Courtesy of Nora Kennedy

PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Measuring Color



Photograph: Nora Kennedy study by Katie Sanderson, The Metropolitan Museum of Art

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Findings from The Heritage Health Index



2.6 billion items of historic, cultural, and scientific significance are not protected by an emergency plan and are at risk should a disaster strike their institutions

Emergency Planning, Response & Recovery



Damage from Hurricane Sandy, October 2012

Recovery of water-damaged photographic materials

- Collections can be safely frozen, if space and time requires
- Freeze drying may be possible with some collection materials
- Document carefully
- Wet surfaces will be fragile and may be tacky



PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Recovery of water-damaged photographic materials

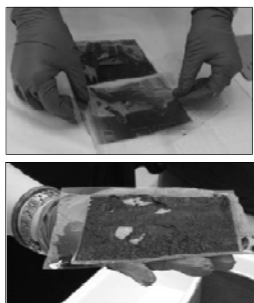
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PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Recovery of water-damaged photographic materials

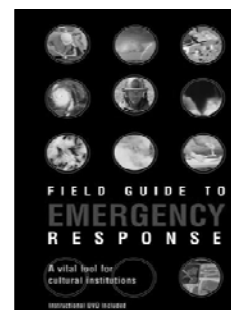
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Field Guide To Emergency Response

- Spiral-bound notebook outlines initial steps, essential functions, 10 most common problems.
- Customized information tabs
- DVD demonstrates basic salvage techniques.

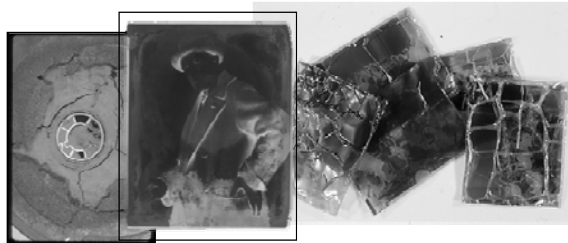


<https://www.heritagepreservation.org/catalog/product.asp?IntProdID=33>

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Generic Preservation Planning for Photographic Collections

3. Inspection of film-base negative collections

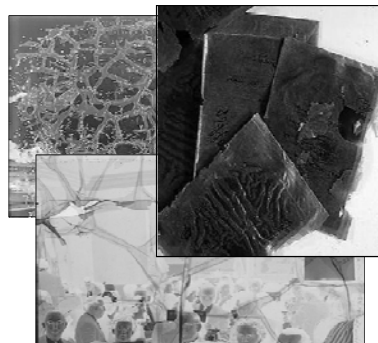


Cellulose Nitrate and Acetate Film Base, provided by Nora Kennedy

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Film Base Identification Guidelines

- Specific dates
- Edge stamping
- Deterioration characteristics



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Film Base Preservation Strategies

Long-term Goals

- Establish cold storage environment (not necessary to separate nitrate from acetate)
- Duplicate heavily used collections



Cellulose nitrate negatives (during rehousing) from the Dr. Rose Collection, Smithsonian Institution Archives

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Generic Preservation Planning for Photographic Collections

4. Duplication program for deteriorated negatives

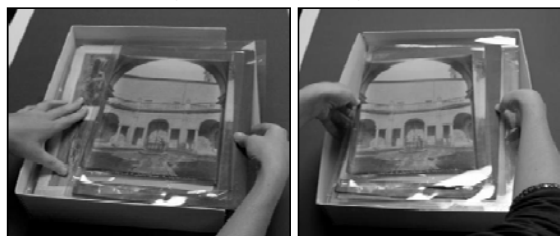


Technical Guidelines for Digitizing Cultural Heritage Materials: Creation of Raster Image Master Files
http://www.digitizationguidelines.gov/guidelines/FADGI_Still_Image-Tech_Guidelines_2010-08-24.pdf

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Generic Preservation Planning for Photographic Collections

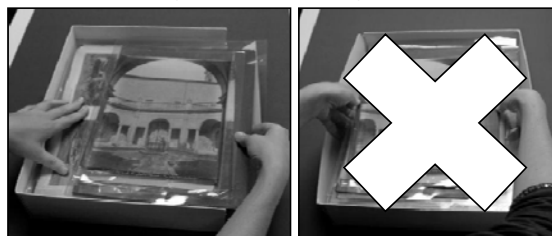
5. Rehousing of historic photographic prints



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Generic Preservation Planning for Photographic Collections

5. Rehousing of historic photographic prints



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Photographic Storage: General Recommendations

- Separate print and negative collections
- Utilize standard-sized enclosures
- Consider plastic versus paper
- Review relevant ISO standards
- Purchase acid-free boxes for extra protection



PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Photographic Storage: General Recommendations

- Separate print and negative collections
- Utilize standard-sized enclosures
- Consider plastic versus paper
- Review relevant ISO standards
- Purchase acid-free boxes for extra protection



PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION

Photographic Storage: General Recommendations

- Paper and board:
 - “acid free” means acidic at the time of manufacture, may become acidic with time
 - Try to find “lignin free,” “rag board,” or “museum board”
 - Should pass Photographic Activity Test



The Metropolitan Museum of Art, credit Taina Meier

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Photographic Storage: General Recommendations

- Plastic:
 - Polyester 😊
 - Polyethylene 😊
 - Polypropylene 😊
 - AVOID vinyl (PVC)
 - AVOID acetate



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Photographic Storage: General Recommendations

- | | |
|---|--|
| <ul style="list-style-type: none"> • Paper and board: <ul style="list-style-type: none"> – “acid free” means acidic at the time of manufacture, may become acidic with time – Try to find “lignin free,” “rag board,” or “museum board” – Should pass Photographic Activity Test | <ul style="list-style-type: none"> • Plastic: <ul style="list-style-type: none"> – Polyester 😊 – Polyethylene 😊 – Polypropylene 😊 – AVOID vinyl (PVC) – AVOID acetate |
|---|--|



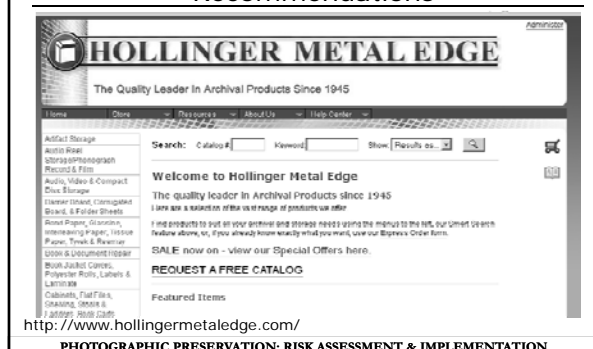
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Paper vs. Plastic

- | | |
|---|---|
| <ul style="list-style-type: none"> • Opaque • Porous • Weaker (may tear easily) • No static | <ul style="list-style-type: none"> • Transparent • Non-porous (not recommended for cellulose negatives) • Stronger • May have sharp edges • Static |
|---|---|

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Photographic Storage: General Recommendations



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Some Recommended Suppliers

- Archival Products: <http://www.archival.com/>
 - 1-800-526-5640
- Gaylord: <http://www.gaylord.com/>
 - 1-800-962-9580
- University Products: <http://www.universityproducts.com/>
 - 1-800-628-1912
- Talas: <http://www.talasonline.com/>
 - 212-219-0770
- Hollinger Metal Edge: <http://www.hollingermetalede.com/>
 - 1-800-862-2228
- Archivart: <http://s390435715.onlinehome.us/>
 - 1-888-846-6847

Photographic Storage: Basic Properties

- Smooth-surfaced paper of best quality available
- pH of paper cold extract
- Lead acetate for the detection of reducible sulfur compounds that will tarnish silver
- The Beilstein Test for the presence of chlorines (in plastics)



Bertrand Lavedrine (Paris) and Tram Vo (Getty Conservation Institute) teaching in Beirut, MEPP

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Photographic Storage: General Recommendations

- Framing:
 - Use spacers to prevent sticking to glazing
 - Using UV-filtering glass or acrylic: <http://www.tru-vue.com/>



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Photographic Storage: General Recommendations

- Separate print and negative collections
- Utilize standard-sized enclosures
- Consider plastic versus paper
- Review relevant ISO standards
- Purchase acid-free boxes for extra protection



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Generic Preservation Planning for Photographic Collections

6. Identification of photographic prints requiring conservation treatment



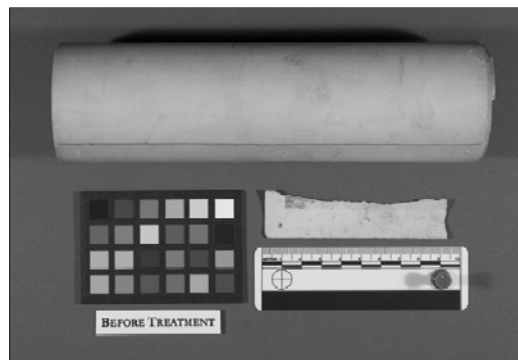
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Conservation Priorities for Photographic Prints

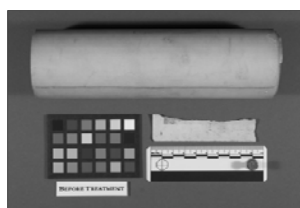
- Active mold
- Flaking binder layers
- Pressure-sensitive tapes
- Rubber cement adhesives
- Severely degraded primary or secondary supports



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PHOTOGRAPHIC PRESERVATION: RISK ASSESSMENT & IMPLEMENTATION



PL 2007_0401: After Treatment Photo: November 2007

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Silver Gelatin Photograph from the Conservation Center for Art and Historic Artifacts in Philadelphia, PA



Private Owner, c. 1920s

Basic Preservation Advice

- Seek advice from experts. Local museums or The American Institute for Conservation.



PRESENTATION TO BE CONTINUED
IN WEBINAR 5...