

# One Acid-Free Box Fits All:

Exhibitions that work for every archives

Who cares what's in the picture?:  
Creating an exhibit about photographic materials

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Clarke Historical Library, Central Michigan University

## **Resources for Photographic Exhibitions in Archives & Special Collections**

Bryan Whitledge, Clarke Historical Library  
Midwest Archives Conference, April 29, 2016

### **Preservation of Photographs:**

NEDCC Preservation Leaflets – Section 5:

<https://www.nedcc.org/free-resources/preservation-leaflets/overview>

CoOL (Conservation OnLine): <http://cool.conservation-us.org/>

Photographic Materials Group (PMG) of American Institute for the Conservation of Historic and Artistic Works (AIC):

<http://www.conservation-us.org/publications/our-publications/specialty-group/photographic-materials#.VyDDoPkrKM8>

### **Identifying Photographic Types:**

NEDCC Preservation Leaflets and CoOL (Conservation OnLine)

Preservation Self-Assessment Program (PSAP) from the University of Illinois Library:

<https://psap.library.illinois.edu/format-id-guide>

Graphics Atlas from the Image Permanence Institute: <http://www.graphicsatlas.org/>

### **Learning About Photographic Processes:**

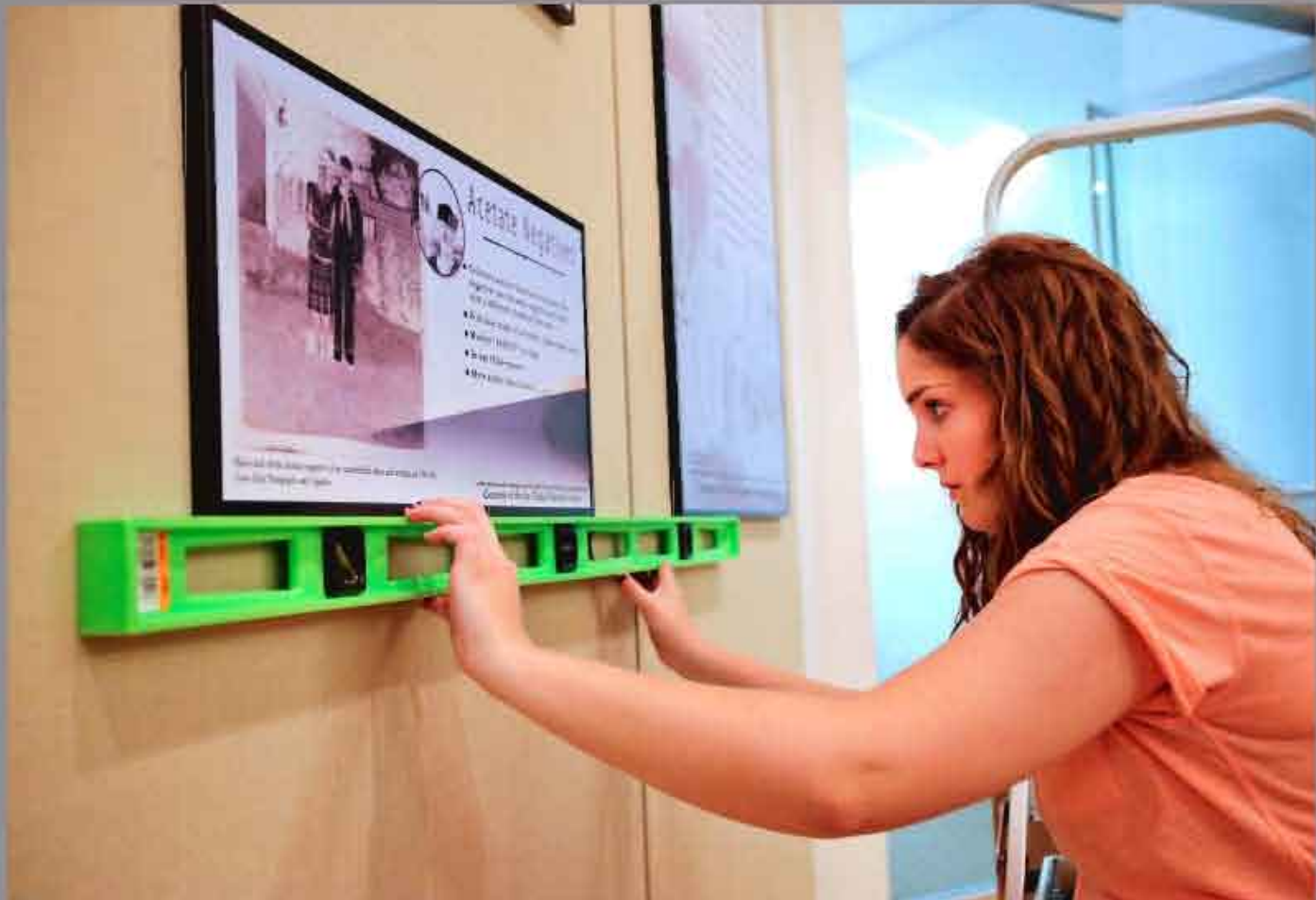
NEDCC Preservation Leaflets, CoOL, Photographic Materials Group of AIC,  
Preservation Self-Assessment Program, Graphics Atlas

Eastman House – Notes on Photographs: <http://notesonphotographs.eastmanhouse.org/>

Alternative Photography: <http://www.alternativephotography.com/wp/>

Daguerreian Society: <http://www.daguerre.org/>

Chicago Albumen Works: <http://www.albumenworks.com/>



# 5 steps

1. Finding a topic
2. Researching a topic
3. Selecting materials
4. Arranging items
5. Writing labels and interpretive text



Louis Daguerre in a  
Daguerreotype and an  
iPhone camera





## UPCOMING EVENTS | [VIEW ALL](#)



### TALKS | **Conversation with Taryn Simon**

Contemporary artist Taryn Simon will discuss her work currently on view in *Taryn Simon: Birds of the West Indies*, in a conversation with Nico Baumbach, film scholar and assistant professor at Columbia University School of the Arts.

[READ MORE](#)



### FILM SCREENINGS, SPECIAL EVENTS | **The 2nd Nitrate Picture Show**

This three-day film festival features screenings of vintage nitrate prints from international archives, talks, workshops, and other opportunities to experience the art and science of film preservation. Passes on sale now!

[READ MORE](#)



### WORKSHOPS | **Woods of Letchv**

If you like camping, photography, this is

[READ MORE](#)



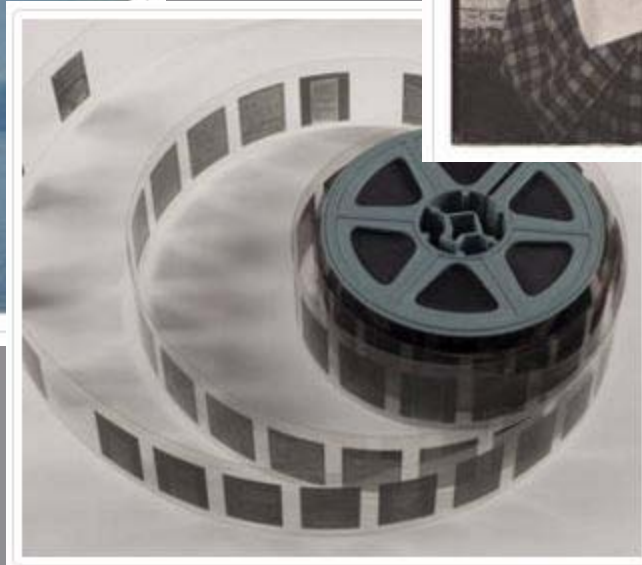
# Constraints

1. Limits of the exhibit space – size and harmful effects of the environment
2. Audience preferences and expectations
3. Budget
4. What is in the archives' holdings?

# What is in the archives' holdings? Negatives



# What is in the archives' holdings? Photographic Prints



# What is in the archives' holdings? Direct Processes



# What is in the archives' holdings? Inkjet Prints and Digital Photography



# What is in the archives' holdings? Photoreprographic Materials



# What is in the archives' holdings? Deteriorating Examples



# Constraints

1. Limits of the exhibit space – size and harmful effects of the environment
2. Audience preferences and expectations
3. Budget
4. What is in the archives' holdings?
5. What can be borrowed?



# What can be borrowed?



# Planning the Exhibition

Organization:

- Chronological
- By photographic process types
- Other themes?

Remember, play around, experiment, have fun – nothing is set in stone

# Resources for expanding knowledge

Preservation of photographic materials:

- NEDCC Preservation Leaflets (Section 5)
- CoOL (Conservation OnLine)
- Photographic Materials Group (PMG) of the American Institute for the Conservation of Historic and Artistic Works (AIC)
- Preservation Self-Assessment Program from the University of Illinois (U-C) Library

# NEDCC Preservation Leaflets



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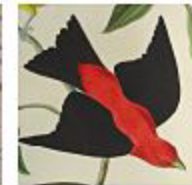
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TEXT SIZE



UPDATED

PHOTOGRAPHS

## 5.3 Care of Photographs

### FREE RESOURCES

- Overview
- Ask NEDCC
- Disaster Assistance
- dPlan™: The Online Disaster-Planning Tool
- COSTEP: Coordinated Statewide Emergency Preparedness
- Digital Preservation
- Preservation 101
- Preservation Education Curriculum

► Preservation Leaflets

NEDCC Staff

Northeast Document Conservation Center

### INTRODUCTION

*Behold thy portrait! — day by day,  
I've seen its features die;  
First the moustachios go away,  
Then off the whiskers fly.*

*That nose I loved to gaze upon,  
That bold and manly brow,  
Are vanish'd, fled, completely gone—  
Alas! Where are they now?*

- Author Unknown. *Punch*, Vol. 12, 1847, p. 143.



[< Back to Leaflet List](#)

### 5. Photographs

- 5.1 A Short Guide to Film Photographic Materials: Identification, Care, and Duplication
- 5.2 Types of Photographs
- 5.3 Care of Photographs
- 5.4 Creating Long-Lasting Inkjet Prints
- 5.5 Preservation of Photographs: Select Bibliography
- 5.6 Storage Enclosures for Photographic Materials

# Resources for expanding knowledge

## Identification of photographic materials:

- NEDCC Preservation Leaflets (Section 5)
- CoOL (Conservation OnLine)
- Preservation Self-Assessment Program from the University of Illinois (U-C) Library
- Graphics Atlas from the Image Permanence Institute

# Preservation Self-Assessment Program

FORMAT ID GUIDE -

GLOSSARY

BIBLIOGRAPHY

SIGN IN



may also exhibit signs of glass deterioration, including a whitish surface haze and/or an efflorescence of viscous droplets

Moderate. Collodion is chemically unstable and very susceptible to abrasion, although they usually have a varnish or albumen coating that protects the surface. Do not attempt to clean the emulsion surface. Should always be protected from excessive humidity.

## Common Size(s)

Non-standard plate dimensions vary to extremes.

## Background

Collodion glass negatives were produced from 1851 to 1885 and were used primarily by professional photographers. The wet collodion process was sensitive enough for exposures to be done in only a few seconds; however, the plate had to be developed immediately while the collodion was still wet. Collodion "dry" plates were created to maintain the plate's sensitivity over a longer time by adding hygroscopic material. This dry plate process was also known as the Taupenot process. The wet collodion process remained more common and was used by some photographers well into the 1880s, even after the emergence of the gelatin dry plate process.

## Storage Environment

Cool storage (below 50 degrees) is recommended, though cold storage should be avoided for glass based images. Allowable Fluctuation:  $\pm 5^{\circ}\text{F}$ ;  $\pm 5\%$  RH

Temp.	40–68°F (4–20°C)
RH	30–40% RH

## Storage Enclosure(s)

Acid-free enclosures and/or folders strongly advised. Each negative should have its own enclosure to protect it from dust, handling damage, and changes in environmental conditions. Glass plates in good condition are best stored in a four-flap enclosure made from archival-quality paper; sleeves and envelopes are acceptable. Broken plates or delaminating negatives should be stored flat in a sink mount, also made from archival paper. Position photo emulsion side away from seams in paper enclosures. Such seams (if any) should be on the sides of the enclosure, not down its center. All storage materials should pass the Photographic Activity Test (PAT) as specified in ISO Standard 18916:2007.

## Storage Orientation

Store vertically with dividers between each plate. May also be stored horizontally (flat), especially the larger or fragmented plates. Enclosures and folders may be stored in hanging files or archival storage boxes. Be mindful of full weight in boxes and on shelves. Wood cabinets should be avoided. Enameled steel, stainless steel, or anodized aluminum are preferred.

## Gelatin Glass Negative



# Graphics Atlas

## Identification

Cyanotype

*from the group: Cyanotype*

### Cyanotype

Overview

Object View

Surface View

Magnification

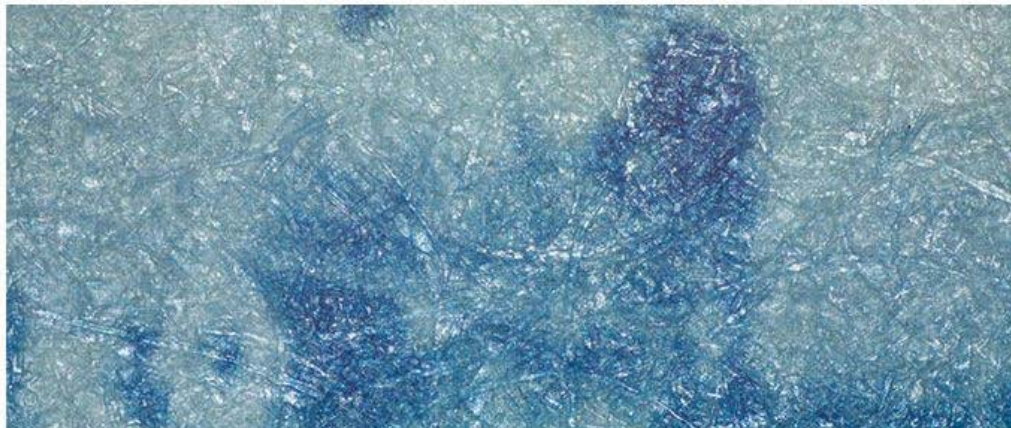
Variations

**Common Use Dates:** 1842-1950

**Alternate Names:** Blueprint, Prussian blue, ferroprussiate

#### Key Identifying Features

- Blue image tone ([Learn more in Object View](#))
- Matte surface sheen ([Learn more in Surface View](#))
- Paper fibers clearly visible ([Learn more in Magnification](#))



Paper fibers clearly visible



# Resources for expanding knowledge

Learning about photographic processes:

- Eastman House – Notes on Photographs
- Alternative Photography
- Daguerreian Society
- Chicago Albumen Works



# Alternative Photography

AlternativePhotography.com

Historical photographic methods in use today – the art, processes and techniques of alternative photography. Photography as it should be: hands on, fun and inspiring.

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GALLERY

PROCESSES HOW-TO

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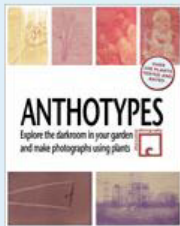
▶ Prints

▶ Digital Printing

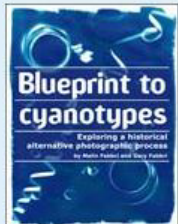
▶ Best Photography

## OUR OWN BOOKS

NOW IN EPUB FORMAT!



[Anthotypes - Make photographs using plants.](#)



[Blueprint to cyanotypes](#)

## Processes How-To

Instructions and recipes on how to work in alternative photographic processes and non-silver techniques. Instructions are provided by photographers and teachers working in the process, written with a practical approach, so; enjoy learning a new process. Have fun! If you are new a good starting point is the [cyanotype process](#) and if you want an environmentally friendly process start with [anthotypes](#).

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### Albumen prints

Replacing the salt print process by the 1840's, albumen prints combine beaten egg whites with salt and potassium iodide for a higher definition photograph.



### Anthotypes

A fun and easy way to make images using juice from fruits, plants, flowers and vegetables as both sensitizer and pigment! Practiced by Sir William Herschel in the 1840's, this method is very



### Bromoils & oil

Bromoils, oilprints, resinotypes and oleobroms: Early twentieth century processes which begins with a silver bromide print and ends with an oily or inked print of alluring elegance.



# Executing the Exhibition Plan

- Protect the materials – Know the environment
- Find representative examples
- Interpretation

**Broken Cases, Daguerreotypes and Ambrotypes,  
ca. 1840s-50s**

From multiple collections

**Broken Cases, Daguerreotypes and Ambrotypes,  
ca. 1840s-50s**

On Loan, Courtesy of Al Willey, CMU Department of Art and Design

**Peeling and Cracking Background, Ambrotype,  
Harriet Thurston, ca. 1850s**

Thurston Family Papers

# Executing the Exhibition Plan

- Interpretation continued



## Kodachrome Reversal Film

- Kodachrome Film developed by Eastman Kodak
- First film to use a subtractive color method. The dye couplers that produce color are added during development resulting in sharper images because the light has fewer layers to pass through
- Complex chemistry involved in processing meant Kodachrome was processed mostly by a small number of specialist Kodak labs
- Valued for high contrast and balanced colors
- In use 1935–2010s
- High stability when stored properly

Unless otherwise noted, the images used in this exhibit are from Clarke Historical Library collections.  
Courtesy of the the Clarke Historical Library

Kodachrome slide showing the construction of the Mackinac Bridge, 1957,  
*Alfred Swanson Mackinac Bridge Construction Slides*

# Exploring preservation

## Preservation Measures

All of the steps taken to preserve photographic materials begin with understanding the various types of photographs and the inherent vices associated with each.

### Environmental Controls

The most critical step to preserve images is to control the environmental conditions: humidity, chemical pollution, and air quality.

- A cool temperature (60°-65° F) and a relative humidity of between 30% and 50% is best.
- More important to controlling humidity is maintaining and handling books, paper and essential objects from photographic materials, which can help reduce environmental humidity.
- Control the environment by creating and maintaining using boxes and folders for storage. Boxes and folders should buffer towards the environment and the photos and prints.
- Controlling ultraviolet light exposure is essential.
- UV light increases in storage in light, glass, plastic, rubber, and wood.
- Use photographic materials up to 20-30 years, more they will be exposed to light, air, and moisture when UV exposure is limited.
- UV-protected windows, cabinet covers, and lighting preservation make safe handling photographs.
- Pollutants such as dirt and airborne particles should be controlled.
- Handling non-pollutants helps extend the life of photographic materials.
- Microorganisms are an intrinsic necessity against pollutants.

### Handling

Keeping photos clean while handling is key to preservation.

- Using lint-free gloves keeps dirt from coming in contact with photographs, which can be particularly critical with negatives.
- Keeping the images in unexposed sleeves or boxes always and handling images by their mounting or edges in general situations.

### Using Reproductions

If an image is fragile, it may be necessary to work only with a reproduction rather than the original.

- Image reproduction, or reforming, was once restricted only for the most valued and most damaged images.
- Digital scanning makes reforming a simple process.
- The availability of images on the Internet means that people from all over the world can access the major historical holdings from archives, libraries, and museums.

Unless otherwise noted, the images used in this exhibit are from Clarke Historical Library collections.  
Courtesy of the Clarke Historical Library

# Events to accompany an exhibit

## **Photography: Process, People, Preservation Open Soon**



The Clarke Historical Library's next exhibit, "Photography: Process, People, Preservation," will be available for viewing September 10th. This exhibit delves into the history and development of photography, showing off many of the different types of photographic materials found in the Clarke as well as some interesting objects from people in the CMU community. The exhibit officially opens Thursday, September 18th and will continue until January. Make sure to stop by and take a look!

## **Fall Speaker Series**

The Clarke Fall Speakers Series has been announced and can be found on the [Clarke Historical Library webpage](#). We will have six speakers this fall, including two in September:

### **Al Wildey, opening the Clarke's Fall exhibit, "Photography: Process, People, Preservation"**

September 18<sup>th</sup>, Al Wildey, Professor of Art and Design at CMU, will discuss the history of photography before the digital era as the Clarke Library opens their new exhibit, "Photography: Process, People, Preservation." The exhibit draws on the Clarke's rich photographic resources to discuss both the history of photography and the ways in which non-digital photographs can be preserved.

Photographs aren't only great  
supplements for exhibitions.

They can be the exhibition.

Thank you

-Bryan Whitledge, Clarke Historical Library