

# Identification and Preservation of Photographic Collections

CARLI Preservation Working Group  
AudioVisual Preservation Forum  
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## TIMELINE OF MAJOR PHOTOGRAPHIC PROCESSES

- Prints
  - Heliograph 1826
  - Daguerreotype 1839-60
  - Salted Paper Prints 1840-60s
  - Cyanotype 1840-1920 (popular 1880-1920)
  - Wet Collodion 1851
  - Platinotype 1881-1930s
  - Tintype 1855-1900
  - Ambrotype 1855-65
  - Albumen 1850s-1920 (popular 1850-95)
  - Carbon 1861-1940
  - Silver Gelatin 1880 - present
  - Color 1946
- Negatives
  - Calotype paper negatives: 1841
  - Glass plate negatives: 1851 (wet) 1871 (dry)
  - Film Negatives: 1903 (nitrate), 1923 (diacetate), 1955 (polyester)
  - Roll Negatives: 1889
  - Color Negatives: 1936
- Transparencies
  - Lantern Slides/Glass Slides: 1850 (popular 1870) - 1950s
  - Autochromes: 1907
  - Film Slides: 1950s

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## WEB RESOURCES

### **Library of Congress** (<http://www.loc.gov/preserv/pubscare.html#photo>)

Caring For Your Photographic Collections  
Care, Handling, and Storage of Photographs: Bibliography.  
Care, Handling, and Storage of Photographs: Information Leaflet.  
Care, Handling, and Storage of Photographs: Standards.  
Care, Handling, and Storage of Photographs: Supplies.

### **NEDCC** (<http://www.nedcc.org/resources/leaflets.list.php>)

#### Chapter 5, Photographs:

A Short Guide to Film Base Photographic Materials: Identification, Care, and Duplication Types of Photographs  
Care of Photographs  
Creating Long-Lasting Inkjet Prints  
Preservation of Photographs: Select Bibliography

### **National Archives and Records Administration (NARA)**

Guide by Formats: <http://www.archives.gov/preservation/formats/>

Processing of Scrapbooks and Photographs:

<http://www.archives.gov/preservation/holdings-maintenance/scrapbooks-photos-albums.html>

Cold Storage: <http://www.archives.gov/preservation/storage/cold-storage-photos.html>

### **Image Permanence Institute** <http://www.imagepermanenceinstitute.org/>

Traditional and Digital Print Stability:

[http://www.imagepermanenceinstitute.org/shtml\\_sub/consumerguide.pdf](http://www.imagepermanenceinstitute.org/shtml_sub/consumerguide.pdf)

Graphics Atlas <http://www.graphicsatlas.org/>

Common Forms of Deterioration

[http://www.archivaladvisor.org/shtml/gal\\_deterioration.shtml](http://www.archivaladvisor.org/shtml/gal_deterioration.shtml)

### **American Institute for Conservation (AIC)**

Caring for Your Treasures: Photographs [http://www.conservation-us.org/data/n\\_0001/resources/live/photographs.pdf](http://www.conservation-us.org/data/n_0001/resources/live/photographs.pdf)

Photographic Materials Group (photographic conservators)

<http://206.180.235.133/sg/pmg/>

### **Canadian Conservation Institute (CCI)**

[http://www.preservation.gc.ca/howto/articles/photos\\_e.asp](http://www.preservation.gc.ca/howto/articles/photos_e.asp)

### **Other Resources**

[http://www.wilhelm-research.com/book\\_toc.html](http://www.wilhelm-research.com/book_toc.html) (entire 758 page book)

<http://www.kodak.com/global/en/professional/support/techPubs/f3/f3.pdf> (Kodak Notch Codes)

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**PAPER RESOURCES** (from the Library of Congress Preservation Office)

Adelstein, Peter Z. 1977. *Manufacture and Physical Properties of Film, Paper, and Plates*. In *Neblette's Handbook of Photography and Reprography*, 7th edition, John M. Sturge, ed. New York: Van Nostrand Reinhold, 127-147.

Albright, Gary. 1989. *Flood Aftermath: the Preservation of Water-Damaged Photographs*. *Topics in Photographic Preservation* (3) Washington DC: Photographic Materials Group, American Institute for Conservation of Historical and Artistic Works. 9-11

Canadian Conservation Institute. *Notes*. There are eight notes that pertain to photograph care:

N2/5 Using a Camera to Measure Light Levels.

N15/3 Display and Storage of Museum Objects Containing Cellulose Nitrate.

N16/1 Care of Encased Photographic Images

N16/2 Care of Black and White Photographic Glass Plate Negatives.

N16/3 Care of Black and White Photographic Negatives and Film.

N16/4 Care of Black and White Photographic Prints.

N16/5 Care of Colour Photographic Materials.

N16/6 Processing Contemporary Black-and-White Photographic Films and Paper.

(May be ordered in English or French at <http://www.cci-icc.gc.ca/>).

Cartier-Bresson, Anne F. 1984. *Les Papier Salés: Alteration et Restauration des Premières Photographies sur Papier*. Paris: Direction des Affaires Culturelles de la Ville de Paris.

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[http://www.imagepermanenceinstitute.org/shtml\\_sub/cat\\_pubs.asp#careid](http://www.imagepermanenceinstitute.org/shtml_sub/cat_pubs.asp#careid)

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## STORAGE GUIDELINES

### Environment

- RH (relative humidity) should be low (30-40%) and constant
- Temperature
  - Should be low and constant
  - For color and cellulose based film prone to accelerated deterioration use COLD storage (below freezing) but be aware of condensation issues.
  - For storage of most other photographic formats, use COOL storage (50-60°F/10-15°C)
- Light
  - Dark storage ideal, necessary for color, cyanotypes, slated paper prints, and poorly fixed albumen and silver gelatin
  - If exhibited or stored with exposure to light, limit to 200-400 lux

### Environment

- “archival”
- pH (<7.0, 7.0, >7.0)
- Lignin-free
- Buffered
- Unbuffered
- High Alpha-Cellulose Content
- Permanent Paper
  - ANSI/NISO Z39.48 (1992)(r2002) “Permanence of Paper for Publications and Documents in Libraries and Archives”



The infinity symbol inside a circle identifies a publication printed on paper that will last for several hundred years. The paper meets the criteria set forth in American National Standard for Information Sciences - Permanence of Paper for Printed Library Materials, ANSI Z39.48-1992.

- LE (Life Expectancy)
- Photographic Activity Test (PAT)