Iowa State University Library
Special Collections and University Archives

403 Parks Library, 701 Morrill Road, Ames IA 50011-2102
(515) 294-6672

# Exhibit Loan Policy

**Introduction**

This policy covers materials owned by Iowa State University Library Special Collections and University Archives (SCUA) to be loaned for exhibition to another ISU campus unit or to an outside institution.

For the purposes of this document, the term "exhibition curator" refers to the contact person for the borrowing institution, while "archivist" refers to the designated SCUA staff member overseeing the loan process. The "conservator" is the Iowa State University Library staff member in the Preservation Department.

**Conditions of loan**

All loan requests will be examined individually, and SCUA reserves the right to deny permission in all cases, based on size, condition, value, vulnerability, or any other factor. Items are loaned only with the permission of the Head, Special Collections and University Archives, or an authorized SCUA staff member acting in their stead.

**Lead Time for Conservation and Preparation of Materials**

These are general guidelines for items that are in good condition or need only minor repair and simple exhibit preparation.

**On campus loans**

Exhibition curator should contact the appropriate SCUA archivist 8-12 months before the exhibit opening to discuss items of interest for loan. A meeting should be scheduled 4-6 months before installation between the exhibit curator, SCUA archivist, and the Library's conservator. This meeting is a consultation to discuss the desired outcomes for the exhibit, what repair work can or should be done prior to the exhibit, and what exhibit supports need to be made. Work will be scheduled accordingly. Preservation should have all materials that need repair and/or exhibit supports a minimum of 1-3 months, as specified by the conservator during condition assessment. If this deadline is missed, Preservation cannot guarantee delivery of the repaired materials in time for installation.

If during the selection/review process it is determined that major repair is needed, the exhibition curator, archivist, and conservator will to determine a schedule for completing the necessary repairs in time for the exhibit installation date.

**Off campus loans**

Exhibition curator should contact the appropriate SCUA archivist 12 months before the exhibition opening to discuss items of interest for loan. The SCUA archivist having oversight over the requested items will approve the items for loan. The SCUA archivist will:

- Review physical items with the conservator

- Ensure the proper documentation/treatment is requested from the Preservation Department prior to sending materials to the borrowing institution
- Communicate environmental and exhibit conditions requirements to the borrowing institution
- Request a facilities report from the borrowing institution
- Advise on shipping/transportation needs including packing and insurance
- Advise on other conditions as appropriate

The Preservation Department should have all materials that need repair or preparation no less than three months prior to when the items are needed for shipment. If this deadline is missed, Preservation cannot guarantee delivery of the repaired materials in time for installation. If materials need major repair, please consult with the conservator to determine a schedule for completing the necessary repairs in time for the items to be shipped to the borrowing institution.

**Conservation Documentation Required for Off-site Exhibits**

The Conservator will evaluate the physical condition of any SCUA collection item that is lent to another institution for exhibit. A condition assessment will be written and photographs of the item will be taken prior to its shipping. A copy of the report will be given to the SCUA archivist and sent to the borrowing institution.

A facilities report will be sent to the Preservation Department prior to the release of collection materials. The borrowing institution will ensure required environmental conditions are met throughout the loan period.

Security, insurance, and transportation will be negotiated between the borrowing institution and the SCUA archivist.

**Length of Time on Display**

The length of time on display is determined by several factors:

- What exhibit case/area is being used
- The environmental conditions of the exhibit case(s) and exhibit hall
- The type of materials and how sensitive they are to exhibit conditions
- The condition, size, or value of the materials

In general, items should not be displayed for more than three months at the lowest possible lighting levels. See the ANSI/NISO Z39.79-2001 "Environmental Conditions for Exhibiting Library and Archival Materials" standard for guidelines.

**Exhibit Support Specifications**

All support materials should be constructed from conservation-quality materials and follow the ANSI/ NISO Z39.79-2001 standard. Supports should properly fit the object and should not cause further stress or damage to library materials. Please consult the SCUA archivist and/or Conservator if you want to use supports not created by the Preservation Department.

**Bound materials (books, serials, journals, diaries, etc.)**

Cradles should be made from pH neutral or buffered paper; acceptable plastics include polyester, polymethyl methacrylate ("acrylic glass" or Plexiglas™) or polyethylene terephthalate (PETG, Vivak™), polyester (Mylar™ or Melinex™), and polypropylene.

When displayed open, one or two-mil polyester or polypropylene strapping should be used to secure the book to the support. Open the book only so far as the binding will comfortably allow. Do not force the book into a wider opening or it may cause damage.

**Flat paper/photographs**

Mats and support boards should be made from pH neutral (pH 7.0) or buffered (pH 8.0-9.0) paper and board.

Window mats should be at least four-ply; support boards should be at least two-ply.

Objects should be attached to the support boards using non-adhesive methods such as polyester or paper corners or slings.

If the object is not completely flat or has friable/fragile media, a sink mat should be used so the object does not come in contact with either the mat or the glazing.

**Other kinds of collection materials**

Consult with the SCUA archivist or the Conservator for advice on the proper supports for other types of collection materials.

**Environmental Specifications**

Environmental damage is cumulative and often irreversible. Environmental conditions shall be monitored frequently enough to maintain the ANSI/NISO Z39.79-2001 Standard and items shall be inspected regularly for evidence of environmentally-induced change. Photographs should follow the lighting guidelines for very sensitive materials (see Appendix A).

**Temperature**

Temperature shall be at a set point not to exceed 72$^{o}$F (21$^{o}$C). For preservation purposes, cooler temperatures are recommended. A temperature range of 5$^{o}$F (3$^{o}$C) on either side of the set point shall be the maximum acceptable total temperature variation. The temperature shall not exceed 77$^{o}$F.

**Relative Humidity (RH)**

Relative humidity shall be kept at a set point between 35% and 50%. The allowable variation in total relative humidity is 5% on either side of the set point. The relative humidity shall not go above 55% or below 30% RH.

**Pollutants**

Gaseous and particulate pollutants shall be controlled or eliminated to reduce damage.

**Light**

Lighting in exhibit cases and exhibit halls should be set at the lowest possible level to allow for visibility of the object. Visible light levels should be set at no more than 50 lux (5 foot candles) for very sensitive materials and at no more than 100 lux (10 foot candles) for moderately sensitive materials. Ultraviolet light levels should be eliminated. If that is impossible, UV light should be reduced below 75 microwatts per lumen. Both the length and intensity of exposure should be reduced to the absolute minimums.

Items that combine media of varying stabilities or where the light sensitivity is not known should be assumed to fall in the category of very sensitive media. Visible light levels should be further reduced or eliminated when exhibition areas are not open to the public. Direct sunlight shall not fall on exhibited items at any time.

*Items generally considered moderately sensitive**
Printed materials (books, maps, etc.)
Objects

*Items generally considered very sensitive**
Photographs
Manuscripts
Blueprints
Textiles

*Consult with the Conservator.

Appendix A

# *Guidelines for Exhibition Light Levels for Photographic Materials*

by
Sarah S. Wagner, Constance McCabe, and Barbara Lemmen [1]

## *Notes*

- These guidelines are based on the experience and opinions of the authors and have not been scientifically established for each type of media.

- The light stability of individual items is often unpredictable because the background of historic materials, including past light exposure, storage conditions, and initial processing, may be unknown. These factors have an impact on light stability. Therefore:
  - A conservative approach has been used to assign light level categories. For example, if a particular process is in one light level category but does not meet all of the qualifications, it should be moved to the next, more-sensitive category, unless otherwise indicated.
  - Micro-fade testing, an accelerated test method originally described by Paul Whitmore, can be used to determine the light fastness of a given photograph. [2]

- Cases, mounts, hand coloring, coatings, toning, inscriptions, and other manipulations and attachments may increase the light sensitivity of a photograph as a whole.

- The categories below give the maximum light exposure an object in that category should receive during one display cycle. A total of 9 months total wall time or less, for the one or more venues within each display cycle is suggested (i.e., 3 venues with 3 months display each per year). Many institutions will not loan for more than one year. Display that exceeds the suggested limits in any category should only be done if the items have been shown to be light stable by micro-fade testing or are instrumentally monitored for color or density changes in the image; if the item changes, display should be halted and substitutes or facsimiles rotated in.

- Although not addressed here, total lifetime exposure is just as important as single display levels/duration and rest periods. Total lifetime exposure is especially crucial with the more light-sensitive categories and with items that are frequently requested for display. Light exposure and the damage it produces are cumulative over the life of the object; the rest period is not regenerative. Faded prints may have the least margin of error for any additional image loss.

- One footcandle (ft-c) equals approximately 11 lux.

- Any combination of light level and intensity, which gives the maximum exposure or less, may be used.
  For example: 3 ft-c x 10 hr/day x 10 mos (300 days) = 9,000 ft-c hrs
  5 ft-c x 10 hr/day x 6 mos (180 days) = 9,000 ft-c hrs
  10 ft-c x 10 hr/day x 3 mos (90 days) = 9,000 ft-c hrs

- These standards assume that all other environmental conditions meet conservation standards: all UV and IR radiation have been filtered out; RH at or below 45-50%; air contaminants filtered out; exhibition materials pass the Photographic Activity Test, etc. For items to be loaned, sealed frame packages are recommended to minimize exposure to high or fluctuating RH and gaseous pollutants in transit and/or on display.

- Many fluorescent lamps, including energy-efficient bulbs, emit highly energetic UV radiation, which has the potential to be especially damaging to photographs; use of effective filtration is essential either on the bulb or in the glazing.

---

[1] Updated 7 January 2009. Original version compiled in 1990 as in-house guidelines for US Library of Congress by Sarah S. Wagner. Published as *Guidelines for Exhibition Light Levels for Photographic Materials* **Topics in Photographic Preservation,** Vol 9, 2001 and by the National Park Service website: http://www.nps.gov/hfc/products/cons/ex-con-technotes.htm

[2] Andrew Lerwill, Joyce H. Townsend, Haida Liang, Jacob Thomas, Stephen Hackney. *A Portable Micro-Fading Spectrometer for Versatile Lightfastness Testing*. **e-PreservationScience** (e-PS) 2008, Vol 5: 17-28.

# *Guidelines for Exhibition Light Levels for Photographic Materials*

## *Extraordinarily* Light-Sensitive

- ***Only facsimiles should be displayed***.

**Autochromes and Other Early Dye Processes**
**Experimental Processes**
E.g., early unfixed salted paper.
**Stabilized Gelatin Silver Prints**
Sensitized silver halide may print out.

## *Very* Light-Sensitive

- Total exposure per year (unless otherwise noted) - 5,000 ft-c hours (50,000 lux hours); e.g. 3 ft-c for 5 months at 10 hours per day or 5 ft-c for 3 months at 10 hours per day. Rest for 3 years minimum between display cycles.

**Any Poorly Processed or Deteriorated Prints**
**Architectural Plans or Photoreproductions**
E.g. blueprint (cyanotype), diazotypes, brownlines, van dykes, photostats, pellet prints.
3 months at 3 ft-c maximum; consider using a facsimile.
**Carbon Prints**
With non-earth, colored pigments (not carbon black or earth pigments) or on poor-quality papers.
**Color Photographic Processes**
E.g. pre-1990 transparencies, pre-1990 prints, and instant prints (Polaroid types). Dye transfers, Ciba/Ilfo-chromes, and post-1990 prints are more stable to light. Higher light levels may be necessary to see color well; consider higher light level category for shorter duration.
**Computer-generated Prints (digital inkjet prints, etc).**
The dye set, printer, and support all influence the fading rate. Assume poor light stability unless light stability ratings are published for the exact combination for the year that the print was generated (see manufacturer websites and www.wilhelm-research.com). More important is inkjet sensitivity to ozone and humidity which can cause drastic image changes. Sealed packages reduce exposure to ozone and humidity during display. Dry prints thoroughly before sealing -- usually a minimum 2-week period is suggested. Protect from UV light.
**Cyanotypes** (Blueprints)
3 months at 3 ft-c maximum; consider using a facsimile.
**Gum Bichromate Prints**
With non-earth, colored pigments (not carbon black or earth pigments) or on poor-quality papers.
**Resin-coated (RC) Supports**
Pre-1980 RC papers (both color and black-and-white) may be prone to cracking; black-and-white silver RC papers may be prone to image oxidation in light, especially UV. These should not be displayed unless toned for preservation (e.g. silver converted to stable compound). Optical brighteners (dyes visible under UV) may be fugitive and are damaged by UV exposure. Optically brightened papers will not appear as white under incandescent light, or when the brightener is faded or exhausted. Use of facsimiles is recommended.
**Woodburytypes**
With non-earth, colored pigments (not carbon black or earth pigments) or on poor-quality paper.
**Photographs with Tinted Base or Binder**
Tinted baryta layers or binders (pink, green, blue, etc.) contain fugitive dyes; these are often found in historic photographs.
3 months at 3 ft-c maximum; consider using a facsimile.
**Hand-colored Photographs of All Types**
**Cased Objects where the Case is Exposed**
Colorants in case components may be fugitive – e.g. velvet or other cloth in the case interior and dyed leather/leatherette covering.
**Colored Paper and Mounts**
E.g. colored construction or dyed papers.
**Modern Inks**
E.g. dye-based fountain pen, ballpoint, felt tip, purple manuscript inks.

## *Moderately* Light-Sensitive

- Total exposure per year - 10,000 ft-c hours (100,000 lux hours); e.g. 3 ft-c for 10 months or 5 ft-c for 6 months at 10 hours per day. Rest for 2 years minimum between display cycles.

**Albumen Prints**
If concerned about the impact of an unknown processing, toning, or coating history, move to the very light-sensitive category.

**Cased Photographs (Daguerreotype, Ambrotype, Tintype)**
No hand coloring; no non-metal case components exposed.

**Collodion Printing-out-Paper Prints (POP)**

**Color Photographic Processes**
Dye transfers, Ciba/Ilfo-chromes and post-1990 prints.

**Gelatin Printing-out-Paper Prints (POP)**

**Platinum (Pt) or Palladium (Pd) Prints**
And combinations of Pt, Pd, and/or silver. No pinkish or yellow staining. Paper support in good condition. However, if signs of image or paper deterioration are present, place in the "very light-sensitive" category.

**Salted Paper Prints**
If concerned about the impact of an unknown processing, toning, or coating history, move to the very light-sensitive category.

**All Manuscript Inks**
Except black India ink.

## *Less* Light-Sensitive

- Total exposure per year - 30,000+ ft-c hours (300,000 lux hours); e.g. 10 ft-c for 9 months at 10 hours per day. Rest for 1 year minimum between display cycles.

**Black-and-white Fiber-based Gelatin Silver Developed-out Paper Prints (GSDOP)**
Known to be well-processed and without hand coloring, color toning, or optical brightener; otherwise, place in the "very light-sensitive" category.
Post-1980 resin coated (RC) papers that have been toned for preservation (e.g. silver converted to a stable compound) may also be included in this category. Optical brighteners (dyes visible under UV) may be fugitive and are damaged by UV exposure. Optically brightened papers will not appear as white under incandescent light, or when the brightener is faded or exhausted.

**Carbon Prints**
Support paper in good condition and light stable. Colorant known to be carbon or other earth pigment. Otherwise, place in "very light-sensitive" category.

**Gum Bichromate Prints**
Support paper in good condition and light stable. Colorant known to be carbon or other earth pigment Otherwise, place in "very light-sensitive" category.

**Photomechanical Prints**
E.g. photogravures, halftones, and collotypes. Coated paper stock and carbon or earth pigment. Paper support of good quality and in good condition. Otherwise, place in "very light-sensitive" category.

**Woodburytypes**
Support paper in good condition and light stable. Colorant known to be carbon or earth pigment. Otherwise, place in "very light-sensitive" category.