

Temperature and Relative Humidity for Photographs

- Temperature: 65-70 degrees Fahrenheit
- Relative Humidity: 30-40% (fluctuating < 10% per day)
- Cold storage for:
 - Sensitive materials
 - Color photographs
 - Nitrate film
 - Acetate film



- Room temperature or below, clean, and stable environment (avoid attics, basements, and other locations with high risk of leaks and environmental extremes) - Recommendations can also range 30-50% rh
- FLUCTUATION is a big factor to keep an eye on, can be very damaging to materials
- 40 degrees or below for cold storage some articles out there about using household freezer units with certain requirements
- Image: Public Domain https://www.flickr.com/photos/tiktik/14193716990/

Monitoring Temp and RH

- "Snapshot" monitoring
- Continuous monitoring
- NEH Preservation Leaflet
 - Monitoring Temperature and Relative Humidity
- Image Permanence Institute
 - Environmental Management Quick Reference



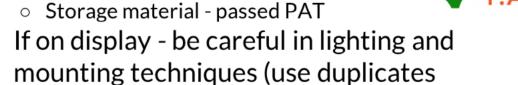


- Can capture info only at certain intervals.
- Or continuously
- Variety of equipment and tools available for any budget.
- https://www.nedcc.org/free-resources/preservation-leaflets/2.-theenvironment/2.2-monitoring-temperature-and-relative-humidity
- https://www.imagepermanenceinstitute.org/education/publications.html
- Image: CC Kai Hendry Attribution 2.0 Generic (CC BY 2.0) https://www.flickr.com/photos/hendry/4166174159/
- Image: Public domain https://www.flickr.com/photos/185642833@N06/49109978666/

Handling, Storage, Display



- Clean hands
 - Gloves in some circumstances
- Avoid any food or drink near materials
- Photographic Activity Test
 - Simulated aging test for storage materials
 - Storage material passed PAT



- when possible)
- Clean hands -enforce this with staff/interns/students, gloves can be problematic sometimes but really useful sometimes for glass, metal, film.
- Have rules posted.
- No food or drink, houseplants also are a risk.
- Photographic Activity Test https://www.imagepermanenceinstitute.org/testing/pat - safest to use, make sure your supplies have passed this test!
- display use duplicates, avoid natural and artificial light (filters, sleeves), safely mount
 - If you have to use originals, make sure to rotate don't leave on
 - Use proper materials for mounting, learn safe techniques, do not damage originals.
 - SHN resource showing you how to mount in different styles.
- Light can fade prints AND paper both natural and unnatural light
- Different prints have different types of sensitivities
- Can get filters for lights esp in storage rooms but keep dark when not in use.
- Image: Public domian slush1000 / CC0 https://upload.wikimedia.org/wikipedia/commons/c/c3/Washyourhands.svg

Storage Enclosure Options

- Sizing
 - o Organize by similar size
 - Avoid overcrowding
 - Make sure materials are supported in folder or box
- Type of storage material depends on photograph
 - o Paper, mylar
- Variety of vendors
- When possible, match the size of storage folder or box to the material.
- Exceptions to box storage flat storage
 - Storing large photos flat, or cased images
- Storing in evenly filled boxes, with supports if needed SO IMPORTANT.
- Too many items in a box overcrowds too much pressure, weight, and stress on materials.
- Too few items leaves items loose in folder/box, can warp, rest at angle, uneven pressure.
- Types of material
 - Some photos do better in paper than plastic.
 - Offgassing is an issue if enclosed in plastic, also has the risk of moisture.
 - However, mylar can be a great option if the photographs are frequently viewed and touched.
 - Mylar, uncoated polyester, polypropylene, or polyethylene (when viewing frequently).
- Many vendors (taken from ATALM list of preferred vendors)
 - o Archival Products <u>www.archival.com</u>
 - o Gaylord Archival www.gaylord.com
 - o Hollinger Metal Edge www.hollingermetaledge.com



- Wide variety to fit your needs
 Archival Products www.archival.com
 Gaylord Archival www.gaylord.com

Identifying Format and Process

- Photograph Process, Photograph Type
- Negatives and Prints
- Ways to identify
 - Support material
 - Color and tone
 - Surface
 - Size
 - How the material is deteriorating
- Identifying photos Why? Can use to find dates of photograph, information about context of photo, and importantly, to know how to best take care of the item.
- Many different types of photographic processes, and the final results (prints) may vary.
- Understand prints are the result of developing negatives = Print (developed or photomechanical), negative (black and white or color)
 - There can be many different versions of a print, and copies of negatives and prints.
 - Can take a lot of detective work in your own collections, or researching other collections.
- These slides will not tell you every type of photograph format and process.
- Instead they will focus on HOW you might go about identifying variety of methods, indicators, and outside resources to use
 - Each way to identify in the following slides will include a couple examples of each measure.

Resources for Identifying

- IPI Graphics Atlas website
- Preservation Self Assessment Program - Collection ID Guide
- Workshops
- Books:
 - Care and Identification of 19th Century Photographic Prints
 - Photographs: Archival Care and Management
- http://www.graphicsatlas.org/
- https://psap.library.illinois.edu/collection-id-guide/
- https://www.worldcat.org/title/care-and-identification-of-19th-centuryphotographic-prints/oclc/901728120
- https://www.worldcat.org/title/photographs-archival-care-andmanagement/oclc/70175019

Support materials

- Material on which the image is printed
- Paper
 - o Ex. Carbon print
- Plastic
 - o Ex. Instant Photo, polaroid
- Metal
 - o Ex. Tin type
- Additional support materials
 - o Ex. Cardboard cabinet card







- What the photo is printed on
 - plastic border, wider on bottom of print polaroids contain both the negative and positive elements (integral).
 - o attached to a thick sturdy card cabinet card or carte de visite.
 - o metal! tintype, daguerreotype.
- Image by Ryan Edge, available under a Creative Commons Attribution ShareAlike license (CC BY-SA).
- Interdirectional (talk) (Uploads) / Public domain https://commons.wikimedia.org/wiki/File:Aaronkraten.jpg
- Image by unknown photographer, original publisher Sojourner Truth, available in the public domain: Gladstone Collection, Prints and Photographs Division, Library of Congress; Reproduction Number: LC-USZC4-6165 (3-11b).

Color and Tone

Examples

- Cyanotype
 - o Distinctive blue tone
 - o 1870s to the 1930s
 - Still used today
 - Sensitive to light
- Chromogenic color print
 - Ex. Kodachrome (pictured right)
 - Vivid full color
 - o Layers of cyan, magenta, yellow dye
 - o 1942-present
 - Sensitive to light and humidity





- Cyanotype blue tone over entire photo.
- Autochrome slide transparency (rgb).
- Henry Peter Bosse (1844-1903) / Public domain https://upload.wikimedia.org/wikipedia/commons/6/66/Henry-Peter-Bosse-Cyanotype-Mississippi-09.jpg
- Chalmers Butterfield / CC BY (https://creativecommons.org/licenses/by/2.5)
 https://commons.wikimedia.org/wiki/File:London, Kodachrome by Chalmers
 Butterfield edit.jpg

Surface and Magnification

Letterpress

- Photomechanical process
- Comprised of dots in 2 or 3+ colors
- Stable, monitor deterioration of support
- o Notice ink squeeze out

Salt Print

- Paper fibers visible (can easily see paper through one layer structure)
- Smooth continuous tone (tiny particles)
- Matte or semi-matte surface
- Warm, brown tones
- Prone to image discoloration and fading





- Letterpress (photomechanical printing out print) comprised of dots, 3 colors.
- Salt print developed out print paper fibers visible, matte surface.
- Matte or glossy.
- Images from graphicsatlas.org

Size

Stereograph

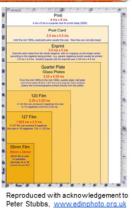
- Two images, mounted 2½ inches apart
- o Image captures from 2 angles
- Viewed through stereoscope

Glass plate negative

- Common: 4 x 5, 5 x 7, 5 x 8, 8 x 10, 10 x 12, 11 x 14
- Glass support
- Sharp and detailed image
- Danger of cracks, fading, mirroring







- Sizing information can help narrow down format.
- standard sizes for different formats, also unique-looking types.
- Svenska litteratursällskapet i Finland / No restrictions https://commons.wikimedia.org/wiki/File:Stereograph, Hudson.jpg
- Roy Boshi / CC BY-SA (https://commons.wikimedia.org/wiki/File:Glass plate negative.jpg
- http://www.edinphoto.org.uk/1 early/1 early photography sizes of plates negatives and prints.htm
- Sizes chart reproduced with acknowledgement to Peter Stubbs, www.edinphoto.org.uk

Deterioration

- Foxing
 - o Age stains
 - o Red/brown spots
 - o Often affects albumen prints
- Silver mirroring
 - Develop reflective, cool tones in darkest areas
 - o Worsens in humid conditions
 - Often affects silver gelatin, albumen, and other prints



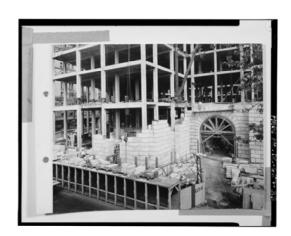




- Foxing brownish red spots (stains that happen with age unknown cause, perhaps fungal - humidity makes it worse) - often in albumen prints
- Silver mirroring reflective, bluish hue in darkest shadows (humidity) silver gelatin and albumin most common, but can happen to others.

Dating Photographs

- Family, community, land history
- Clothing and hairstyles
- Scenery, background, event information



- If you are working on descriptions and metadata, you can get a lot out of photos from viewing the image itself.
- Photocopy of original black-and-white silver gelatin print, TWELFTH STREET DRIVEWAY ENTRANCE, August 31, 1929, photographer Commercial Photo Company - Internal Revenue Service Headquarters Building, 1111 Constitution Avenue Northwest, Washington, District of Columbia, DC
- NPS Historic American Buildings Survey (HABS)Public domain -
 - https://upload.wikimedia.org/wikipedia/commons/d/db/Photocopy of o riginal black-and
 - white silver gelatin print%2C TWELFTH STREET DRIVEWAY EN TRANCE%2C August 31%2C 1929%2C photographer Commercial Photo Company -
 - Internal Revenue Service HABS DC%2CWASH%2C657-23.tif

Metadata

- Notch codes
- Photographer information
- Metadata written on or attached to photos, envelopes
- Metadata from related items or collections
 - What else in your collections might give you assistance?
- People
 - Can community members identify people, places, activities?
- If you have staff doing this work
 - make VERY clear guidelines about what to look for, and what format to write descriptions in.

Credits

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- Minicons by Webalys
- This template is free to use under <u>Creative Commons Attribution</u> license.
- These slides contain changes to color scheme and content.

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