



# Preserving Historic Images in the 21<sup>st</sup> Century

Presented by:

**Ric Wolford**

Douglas Black & White, Inc.

dba

Douglas Photographic Imaging

[douglasphoto.com](http://douglasphoto.com)

# Ric Wolford

- Started in Photography as a delivery boy for One-Hour Film Service in Wichita at age 17.
- Processed and printed color and black & white film since age 17.
- Became Custom Black & White Printer at age 19 for a commercial lab.
- Became Photographer's Assistant at age 20.

# Ric Wolford

- Became Lab and Studio Manager at Edwards Typographic Services at age 22.
- At 25 started Douglas Black & White, specializing in Black & White film processing and printing, as well as commercial photography in a 1200 sq. ft. space.

# Ric Wolford

- During the following 29 years Douglas Black and White has adapted to the ever-changing photographic industry, including the name change to reflect more modern needs in the industry.
- Douglas Photographic Imaging is now in a 23,000 sq. ft. facility and is the largest commercial and retail photo lab in Wichita.

# Douglas Photographic Imaging

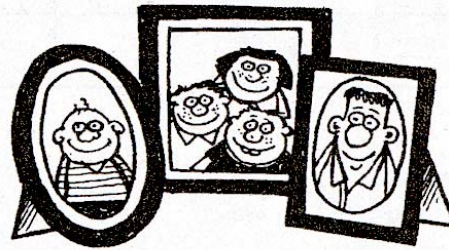
- Regularly produces archival prints, negatives, transparencies and digital images for organizations including:
  - Smithsonian
  - Eisenhower Museum
  - Sotheby's Auctions
  - And many other museums across America



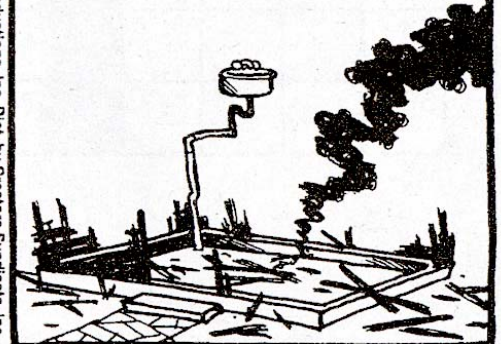
This recent cartoon from The Other Coast describes what we're concerned with today.

## THE OTHER COAST

STORING PRECIOUS FAMILY PHOTOGRAPHS USED TO BE A DICEY AFFAIR...



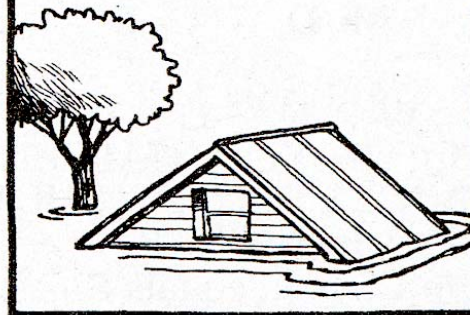
THEY COULD BE DESTROYED IN A HOUSE FIRE.



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**RASHIDE** 10-12  
OR TURNED INTO PULP IN A CATASTROPHIC FLOOD.



BUT THE ADVENT OF DIGITAL PHOTOGRAPHY HAS MADE SUCH HAZARDS A THING OF THE PAST...



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# Taking • Saving • Preserving

- Today we'll discuss methods of using both Analog and Digital techniques for Taking, Saving and Preserving your important images.
- We'll discuss ways to marry Analog and Digital procedures to maximize the safety and security of these images.

# Taking

- Traditionally “Taking” a photograph has been a method of capturing a moment of time on film.
- Time has it’s way with these photographs, just as it does with those historic items we’ve photographed.
- This leads us to the need to “copy” these photographs for further preservation.



# Saving

- Printing those photos has traditionally been done on various materials each offering a different & variable lifespan.
- Storage and presentation of these photos can compromise the lifespan of the films or prints.
- Technological advancements offer us new methods of saving these images from further deterioration.

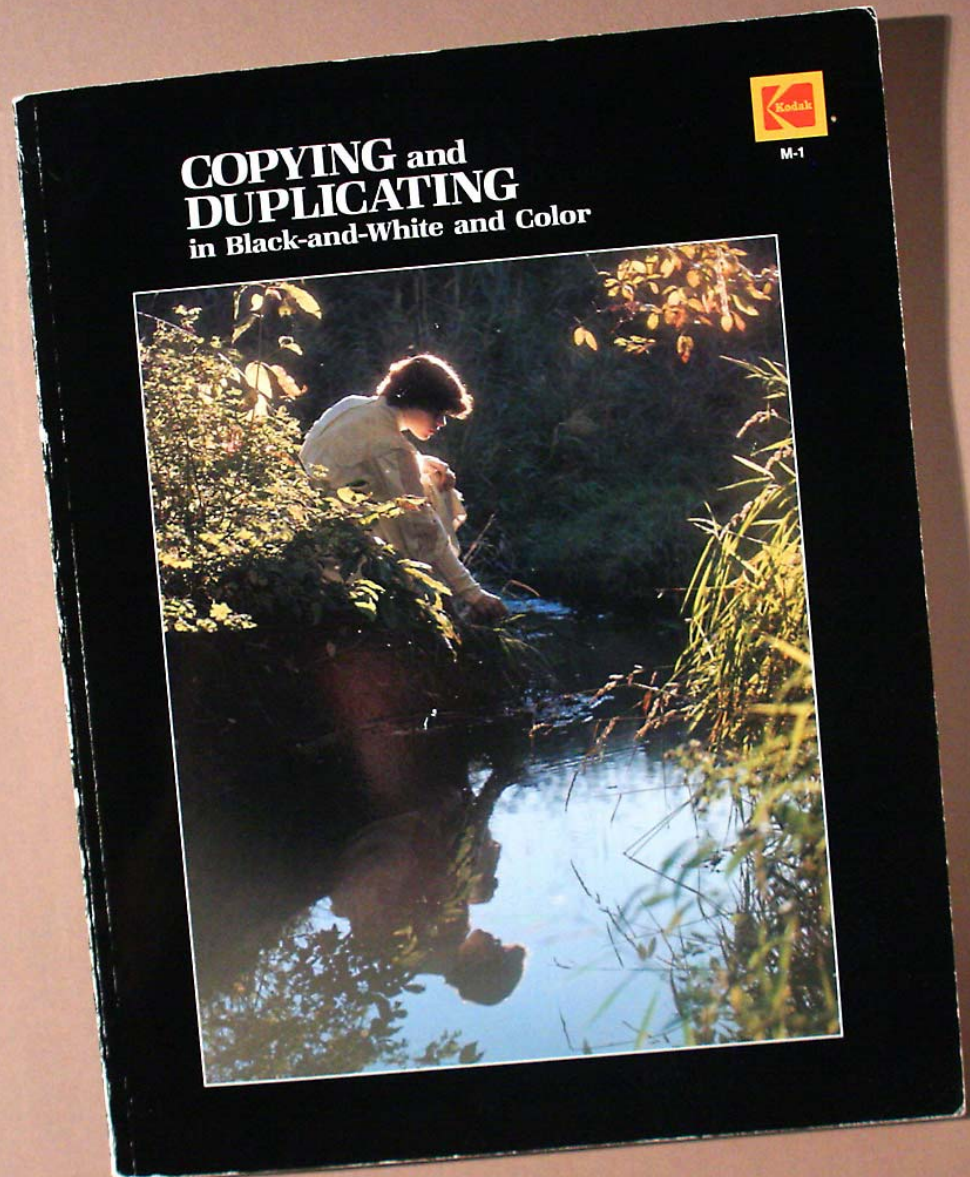
# Preserving

- Long-term storage may introduce challenges to the Historian.
- It's critical that Historians take advantage of modern-day methods as well as tried and true procedures for the protection of these images.
- Archival processing and printing of photographs requires highly specialized talent, materials and equipment.

# Taking Photographs

- Today our options for creating photographs has been expanded exponentially by the advances in digital photography.
- In film we have many options designed to accommodate photography in various lighting situations.
- Digital photography enhances this by giving us the ability to change White Balance and ISO settings instantly.

# Kodak M-1 Copying and Duplicating Book



# Collection of Photographs to Copy



Photo by Tom Beelmann

Old photographs may be daguerrotypes, tintypes, albumin prints, ambrotypes, salted paper prints, or old gelatin silver prints made on gas-light paper. All should be handled with great care to avoid damage.

A grayscale photograph of a person operating a microfilm reader. The person is wearing a light-colored shirt and is looking down at a document on the reader. The reader has a microscope-like lens and a light source. The text is overlaid on the image.

Lets Get Down  
to  
The Basics of Copying

# Types of Lighting



Photo by Tom Beelmann

A reflector-flood lamp is shown at left. A tungsten bulb suitable for use in a reflector is at right. Above is an electronic flash unit suitable for copying.

# Copy Camera Stand with Tungsten Lights

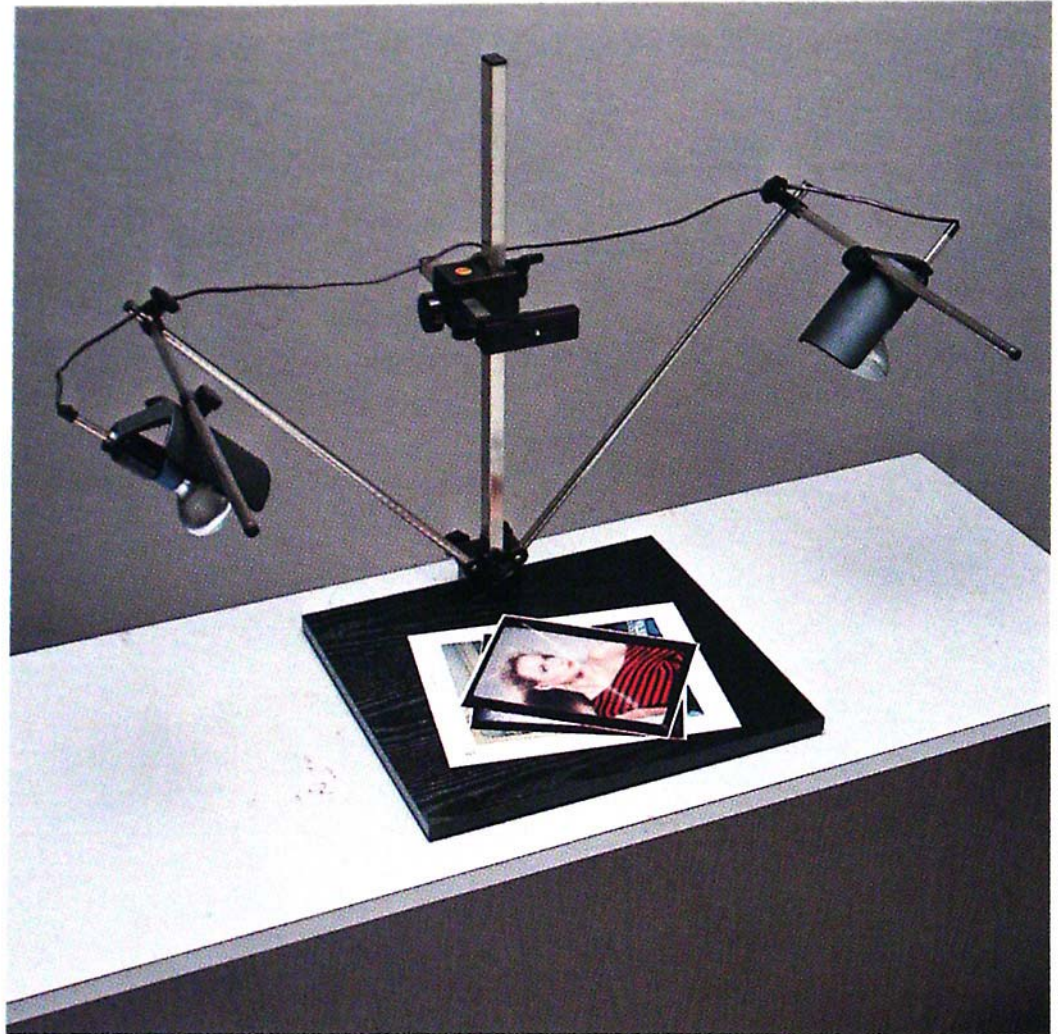


Photo by Tom Beelmann

A complete copy stand with lights for 35-mm vertical copying. Fairly large originals can be copied with this equipment.



# Copy Camera Stand with Electronic Flash



Photo by Tom Beelmann

Copying with electronic flash. The flash unit on the right is synchronized with the camera. The unit on the left is equipped with a slave triggering device that flashes the slave unit when the synchronized unit is fired. Flash units courtesy of Rowe Photo, Inc., Rochester, NY.

# Copy Camera Stand with 4x5 Camera



Larger copy stands are required for vertical copying with view cameras. Note the accessory finder that permits easy magnified viewing of the ground-glass image.

# Kodak Gray Scale

© The Tiffen Company, 2000

KODAK Gray Scale

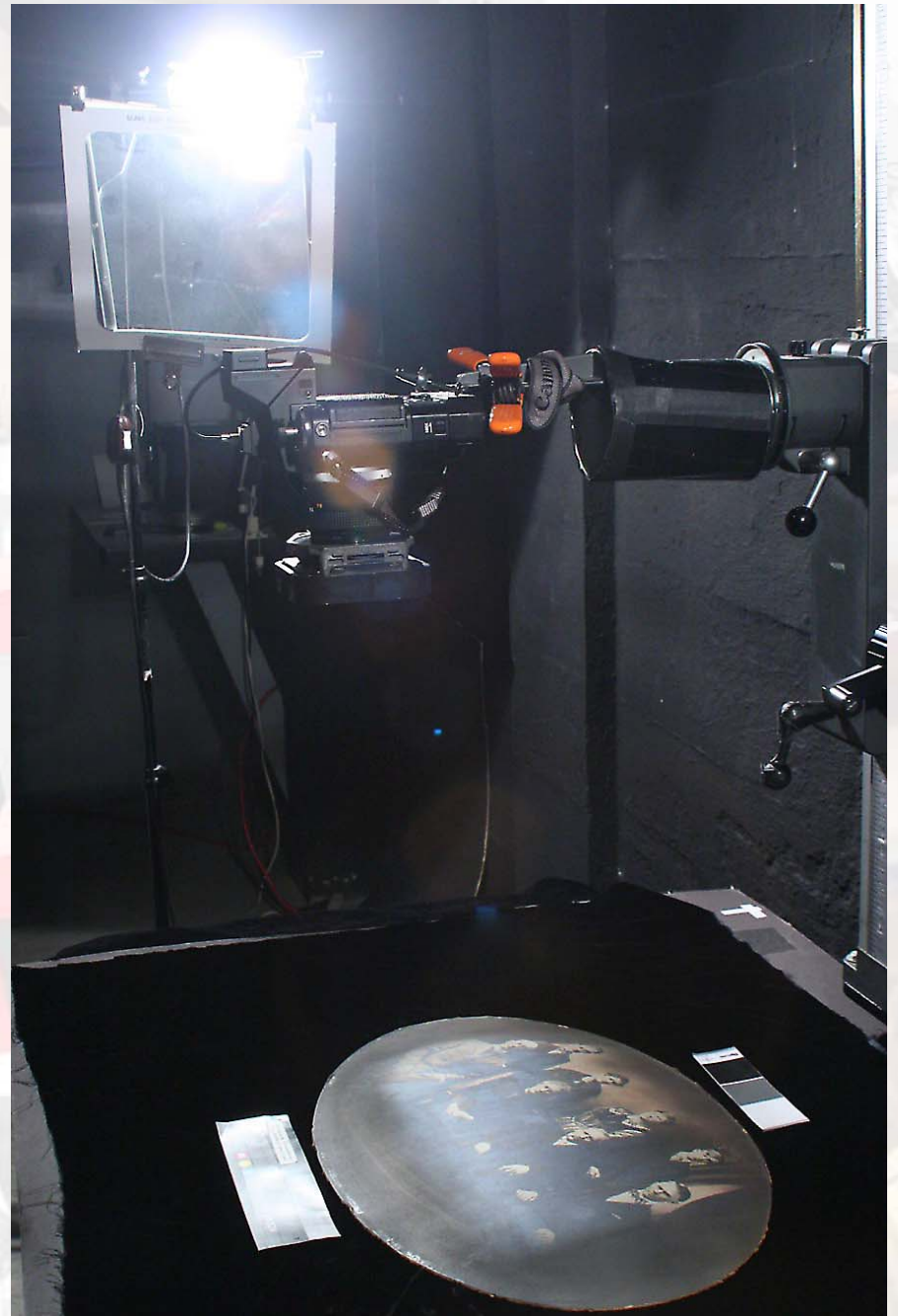


**Kodak**  
LICENSED PRODUCT

**A** 1 2 3 4 5 6 **M** 8 9 10 11 12 13 14 15 **B** 17 18 19

Copied by douglas photographic imaging  
[www.douglasphoto.com](http://www.douglasphoto.com) 316-264-3013 2003

Example of  
copying  
using  
Polarized Light



# Polarizing Filter



# Copied without Polarization



# Copied with Partial Polarization

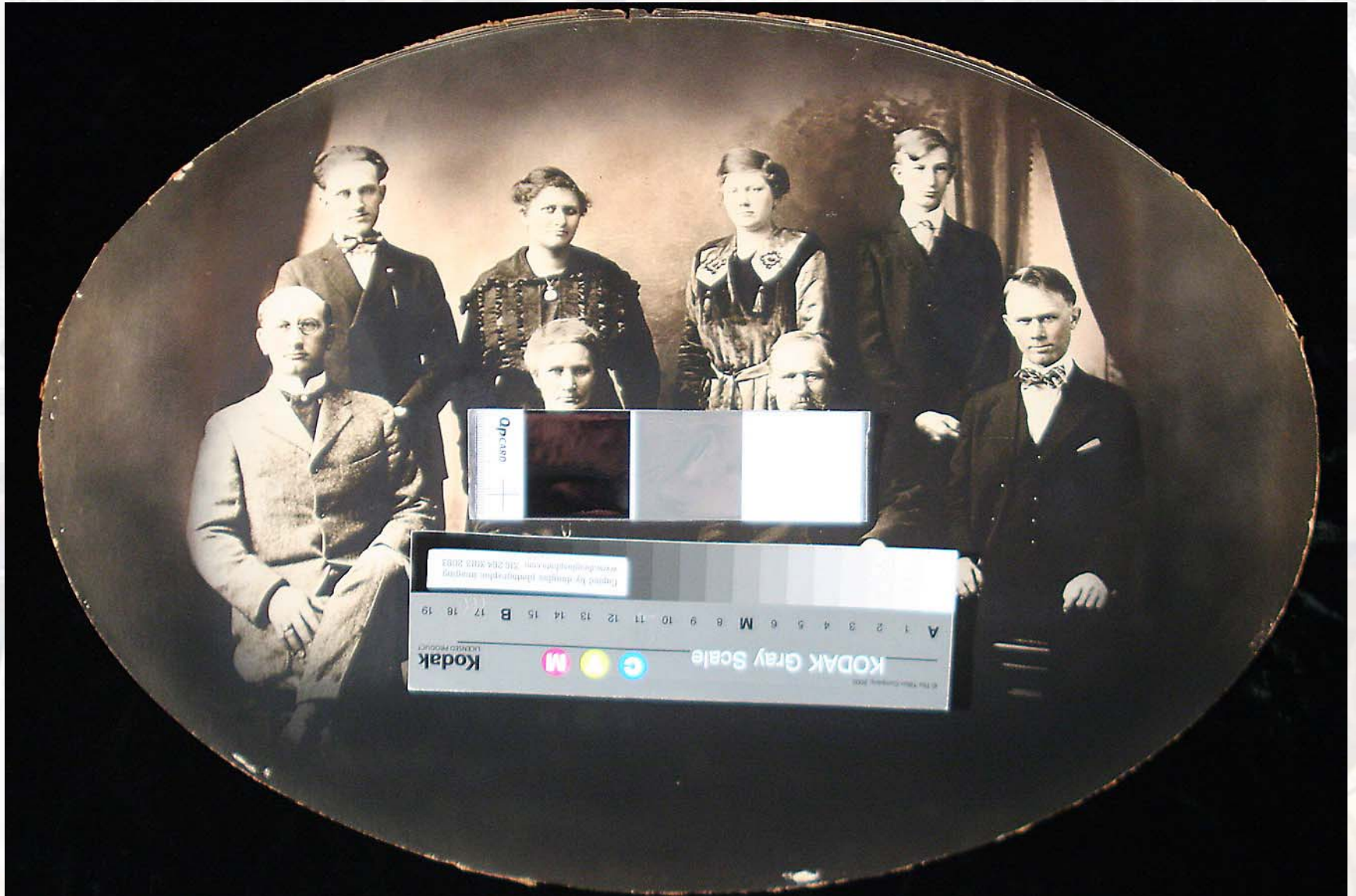


Copied with Full Polarization





# Copied with Gray Scales



# Copied Using a Red Filter



Copy by Tom Benson

Many reddish colored stains mar this old photograph. This copy was made without a filter on KODAK Technical Pan Film.



Copy by Tom Benson

This copy, also on KODAK Technical Pan Film, was made through a KODAK WRATTEN Filter No. 25, (red). The filter has lightened the stains considerably, making them easier to retouch.

# Copied Using a Blue Filter



Photographer unknown

Set 6. This print has browned and faded so badly that the image is very difficult to make out. However, the flexibility of this method of copying is useful, even with this type of original.



Copy by Kodak Research Laboratories

By using the blue filter, a full development, and by printing with a high contrast POLYCONTRAST filter, the image in the copy print has been made quite visible.

# Using Different Types of Film



Copy by Tom Benson

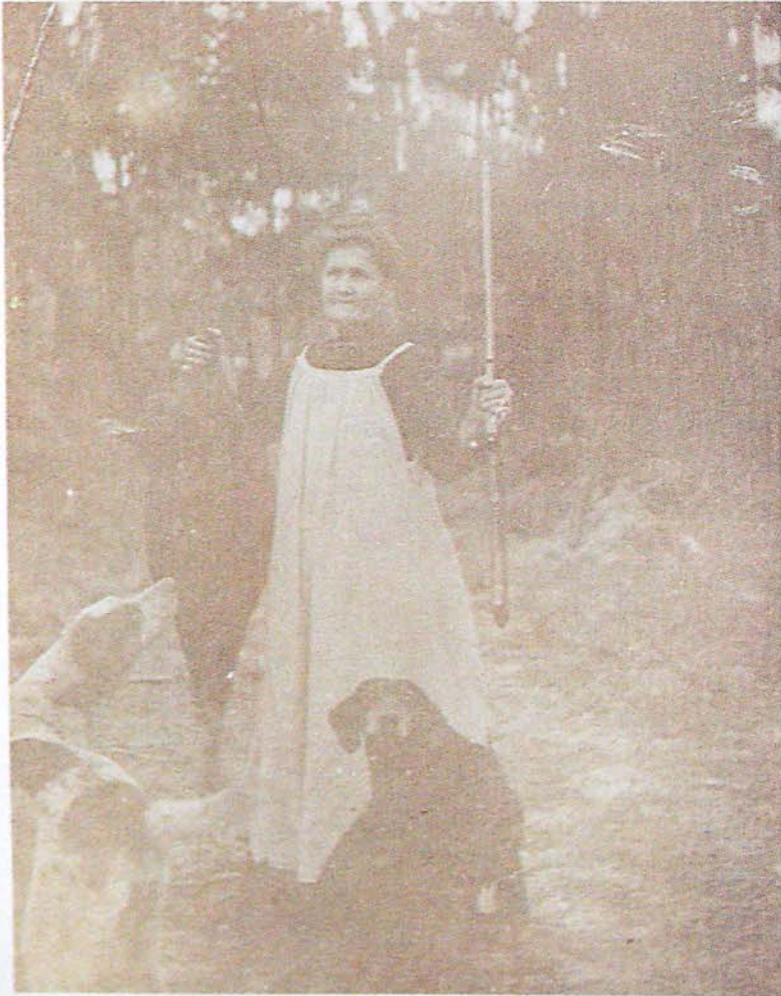
An alternative to using KODAK Technical Pan Film when copying low contrast originals is to use KODAK Process Pan or KODAK Process Ortho Film. This faded print was copied on KODAK Process Pan Film.



Copy by Tom Benson

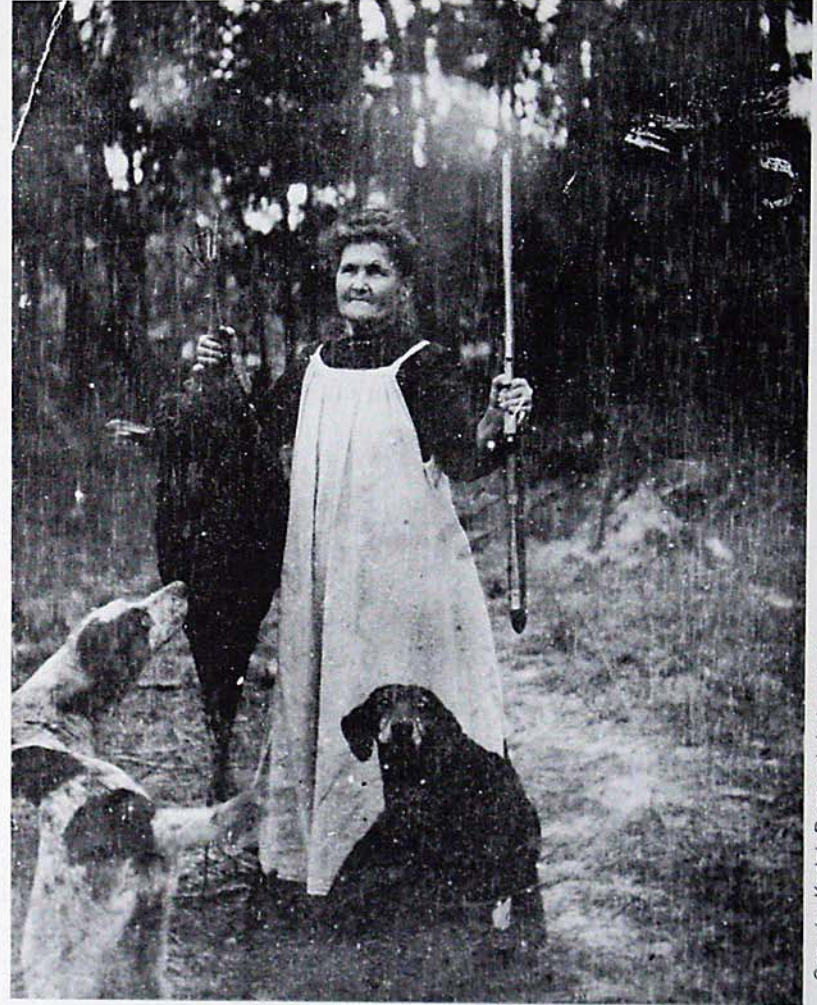
This copy print was made with normal contrast paper (a PC2 filter on KODAK POLYCONTRAST Rapid II RC Paper *F*-Surface).

# Adding Contrast to a Print



Photographer unknown

Set 5. The same things have happened to this original as happened to the set 4 original, only more so. While the image is discernible, the print has a very low contrast.



Copy by Kodak Research Laboratories

The copy print has brought back the contrast, but the shadow detail has been nearly lost. (It may not have been in the print originally.)

# Shooting Copies of Reflective Images

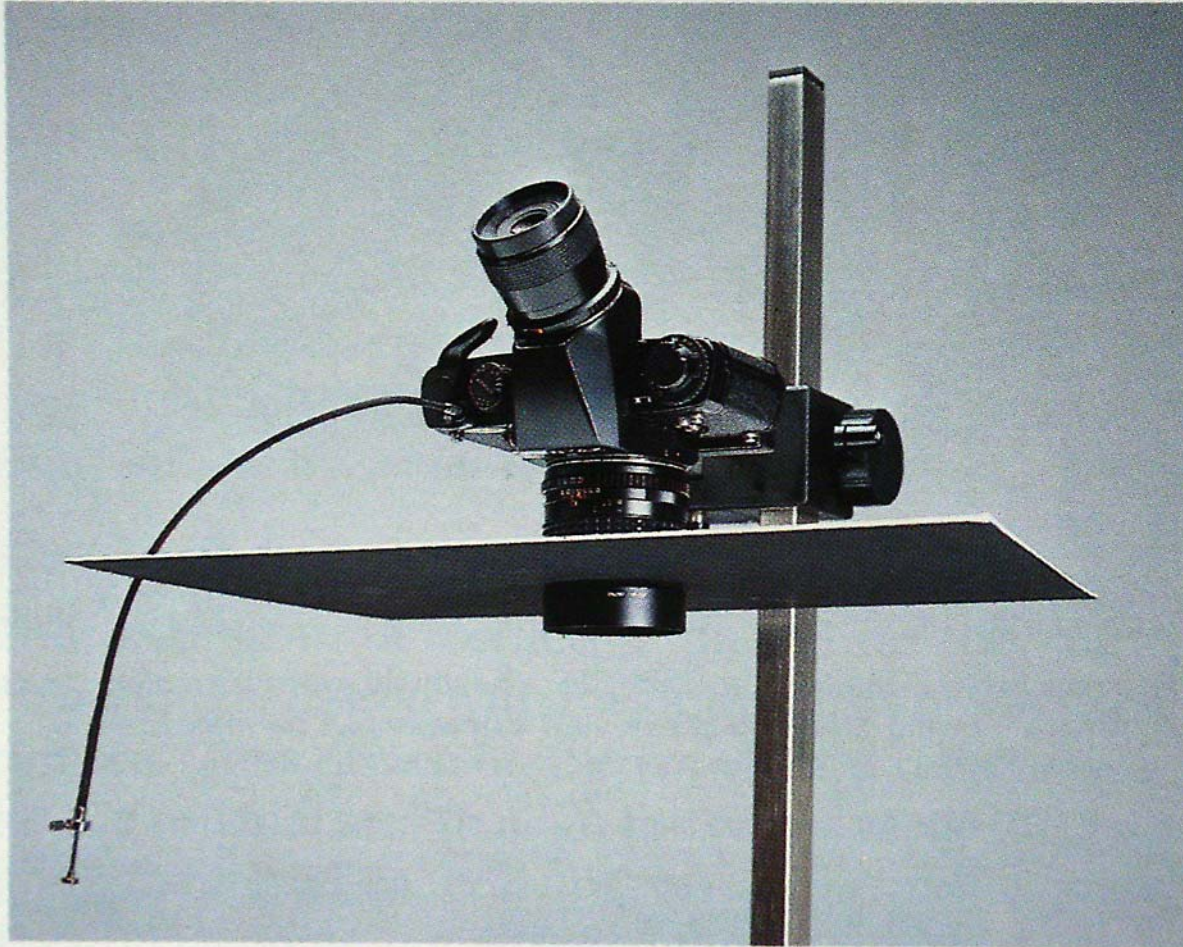


Photo by Tom Beelmann

The reflection shield is shown in detail. A hole in the center of the card is cut to just fit the camera lens. Black photographic masking tape can be used to attach the card to the lens, if necessary.

# Saving and Preserving the Copied Images

Various output methods are available for both Digital and Analog copies. The most widely accepted method of printing Archival black & white (sepia) images is on Fiber-based papers.

# Saving and Preserving the Copied Images

Printing from Digital is commonly done on emulsion-coated photo papers or inkjet medias. It's not uncommon for modern wet-processed color print papers to be rated for 150 years of life.

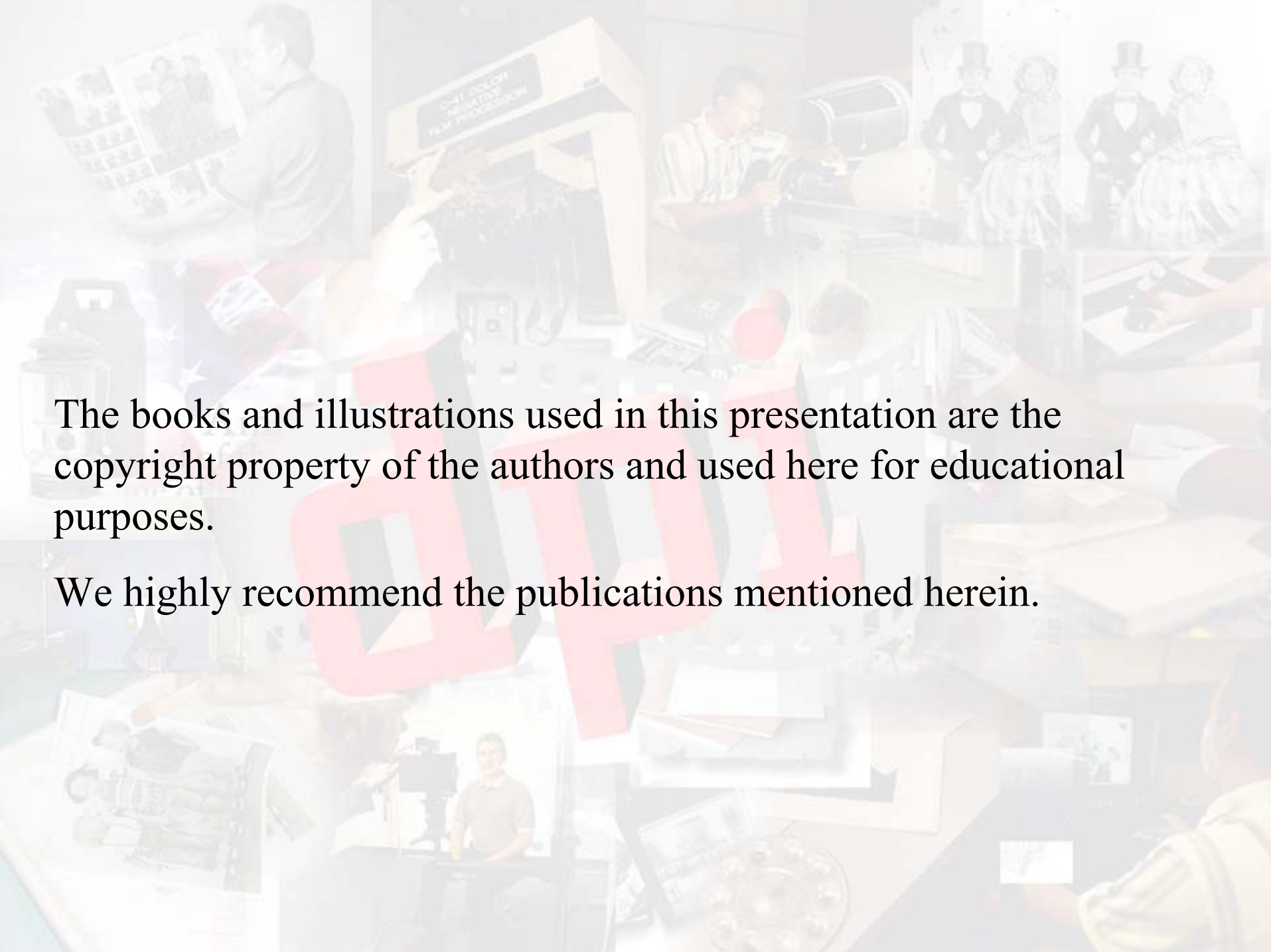
Recent innovations in inkjet prints are extending the life of these prints to match those of wet-processed print papers.



# Saving and Preserving the Copied Images

All of your negatives and digital images from your copying efforts need to be safely stored to prevent degradation.

A variety of archival storage materials are available today and are continually being improved on. This includes archival quality CDs for storage of your digital images.



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We highly recommend the publications mentioned herein.