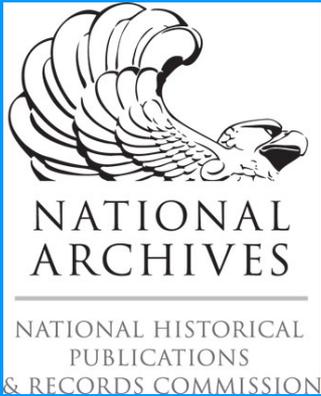




# **DIGITIZATION OF RECORDS**



Megan K. Friedel and Mariecris Gatlabayan,  
Archivists

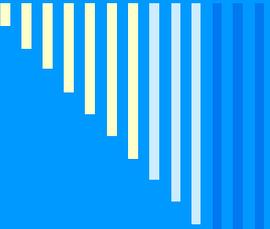
University of Alaska Anchorage  
Alaska State Historical Records Advisory Board

April 25, 2013



# Scanning Materials: Things You Should Know

- ppi or dpi = Pixels per inch or Dots per inch (RESOLUTION)
- Higher resolution = higher quality image
- High resolution = anything over 100 dpi
- Minimum resolution for publication = 300 dpi
- Maximum resolution for internet use = 72-100 dpi (low resolution)



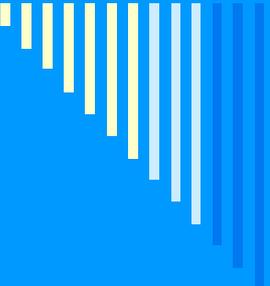
## Basic Digitization Rules

- Digitization is NOT preservation.
- Digitization IS access and use.
- Digitizing materials can reduce handling and use of fragile or valuable originals but should NOT be considered a substitute for the original document.
- Your scan will only be as good as the original.
- Scans are NOT PERMANENT. “Only permanent until the next migration.”
- The life-span of your digital image depends on HOW you scan your materials and/or STORE the files
- KEEP THE ORIGINAL MATERIALS. The photograph will most likely outlive the digital image. If you lose the digital image you can always scan the image again.



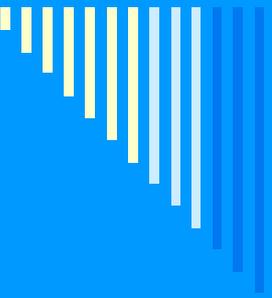
# Scanning Documents: File Types

- ❑ Use only these standardized file types: TIFF (.tif), JPEG (.jpg), and PDF (.pdf)
- ❑ TIFF (Tagged Image File Format): higher-quality image with more information, larger file size
- ❑ JPEG: compressed image with slightly lower quality, less information, smaller file size
- ❑ PDF (Portable Document Format): fixed lay-out flat document, use only for manuscripts or written documents

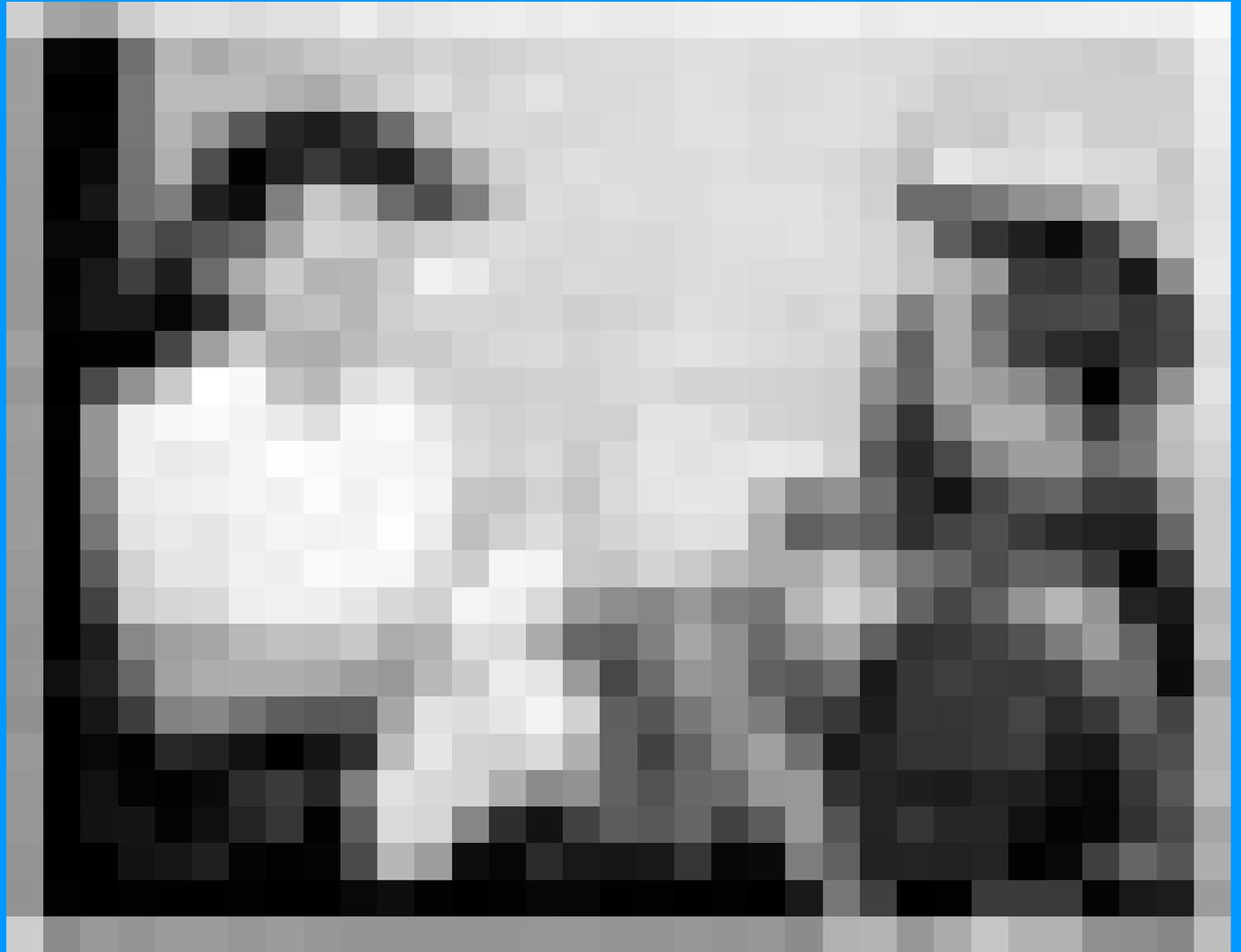


# Scanning Documents: Best Practices

- ❑ Always scan at highest resolution (300, 600, or 1200 dpi) and save as a TIFF → PRESERVATION COPY
- ❑ You can also make an ACCESS COPY that is a JPEG
- ❑ When you post an image to the internet, you will typically want to post a low-resolution JPEG

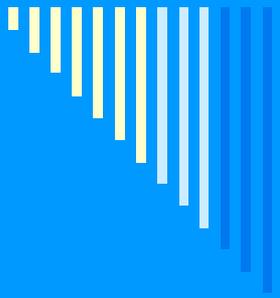


**10 ppi**  
**33 x 26 pixels**  
**3.3 x 2.6 in**  
**11.3 KB**



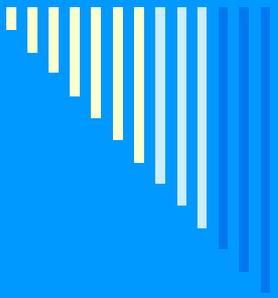


100 ppi  
326 x 262  
pixels  
3.26 x 2.62 in  
41.6 KB



**300 ppi**  
**979 x 786**  
**pixels**  
**3.263 x**  
**2.62in**  
**142 KB**





1200 ppi  
3915 x  
3144 pixels  
3.263 x 2.62  
11.7MB



# Preservation Copy

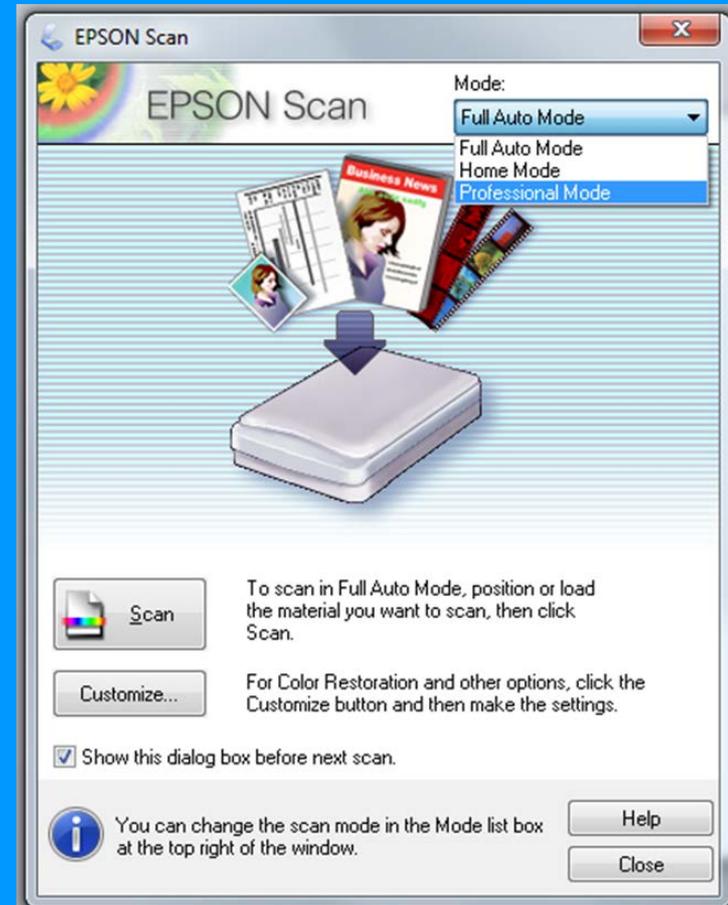


# Scanning Photographs: Slides & Negatives

- ❑ MUST use a scanner with a transparency adapter (light source that comes from the top as well as the bottom)
- ❑ MUST use a transparency holder (comes with transparency scanner) or make your own

# Brief Introduction to Scanning

- GOAL: to make a standardized scan in a format that won't change over time
- To do this, you will have to take advantage of the “advance” or “professional” mode of your scanner software. Do NOT use “Auto” modes.



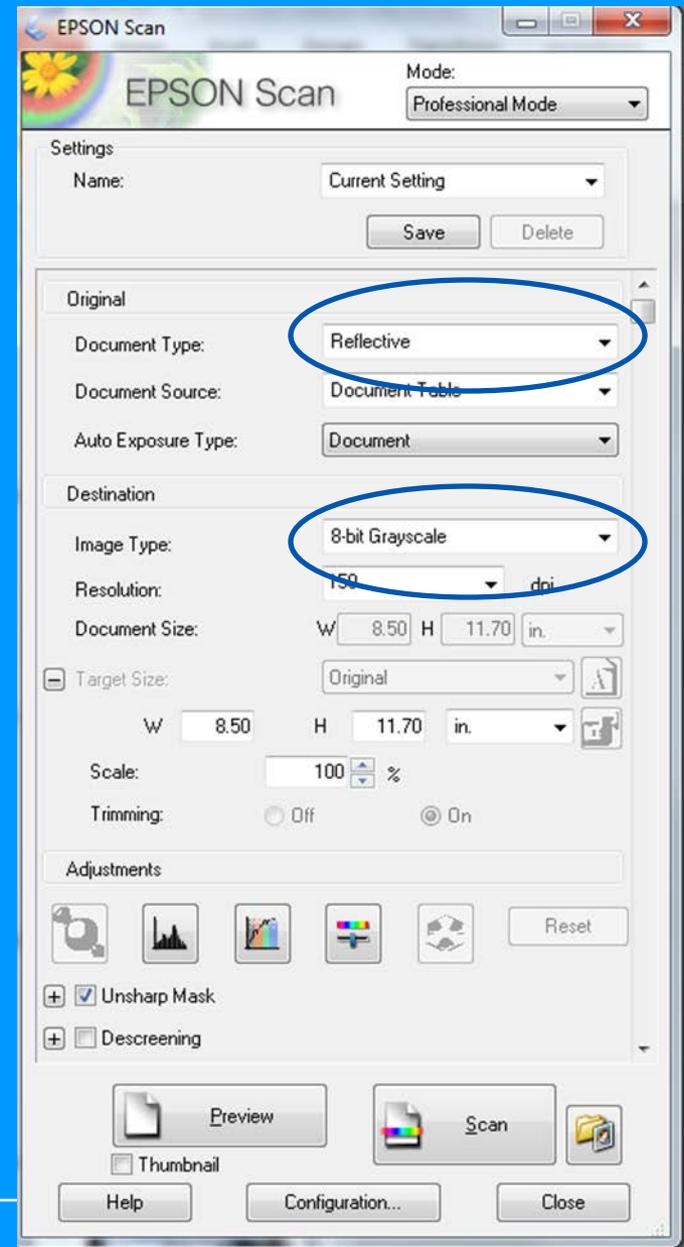
# Scanning

**Step 1.** Choose the following  
IMAGE TYPES:

→ 8-bit grayscale for black and  
white materials

→ 24-bit color for color materials

- SCANNING PHOTOS: If your scanner allows you to select for document types, select “Photo” or “Reflective”.
- SCANNING DOCUMENTS: If your scanner allows you to select for exposure types, select “Document.”



# Scanning

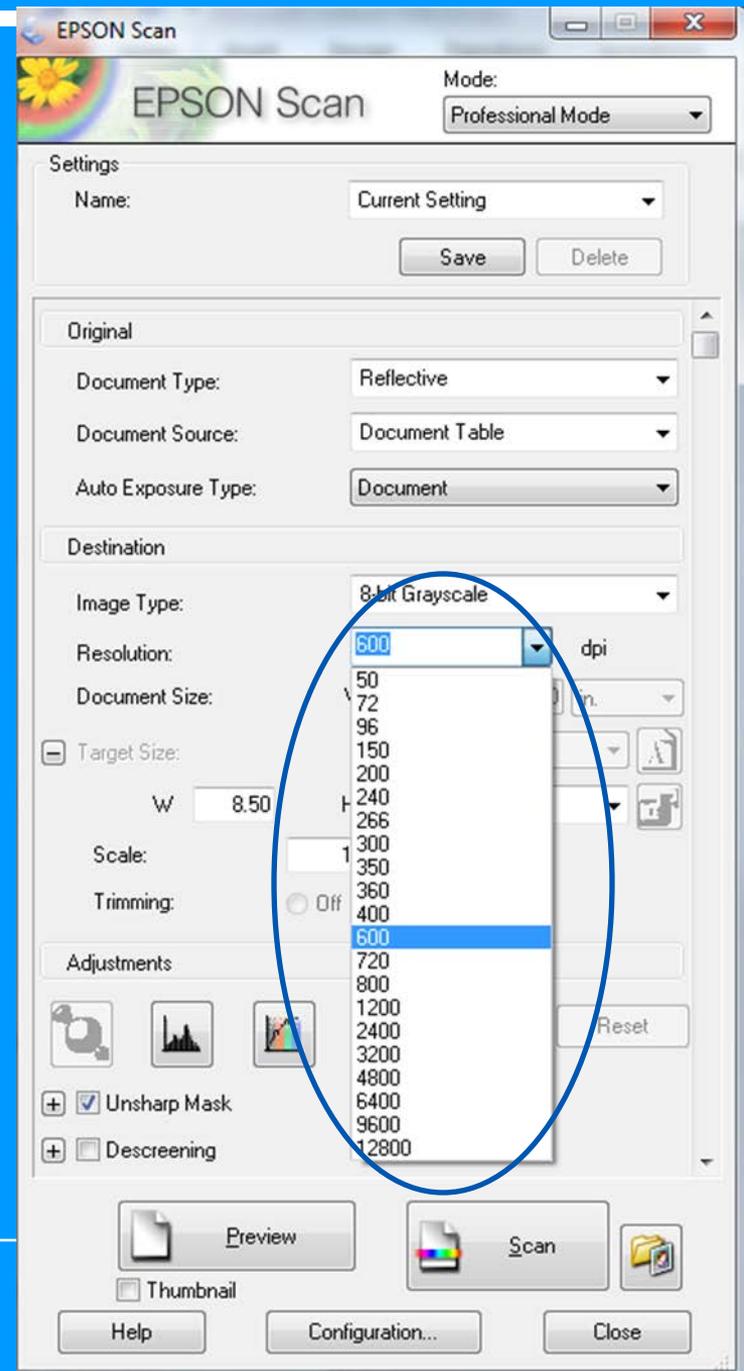
**Step 2.** Scan the image at a **HIGH RESOLUTION** to preserve detail:

→ 600 dpi for photographs and most documents

→ 1200 dpi for slides or negatives

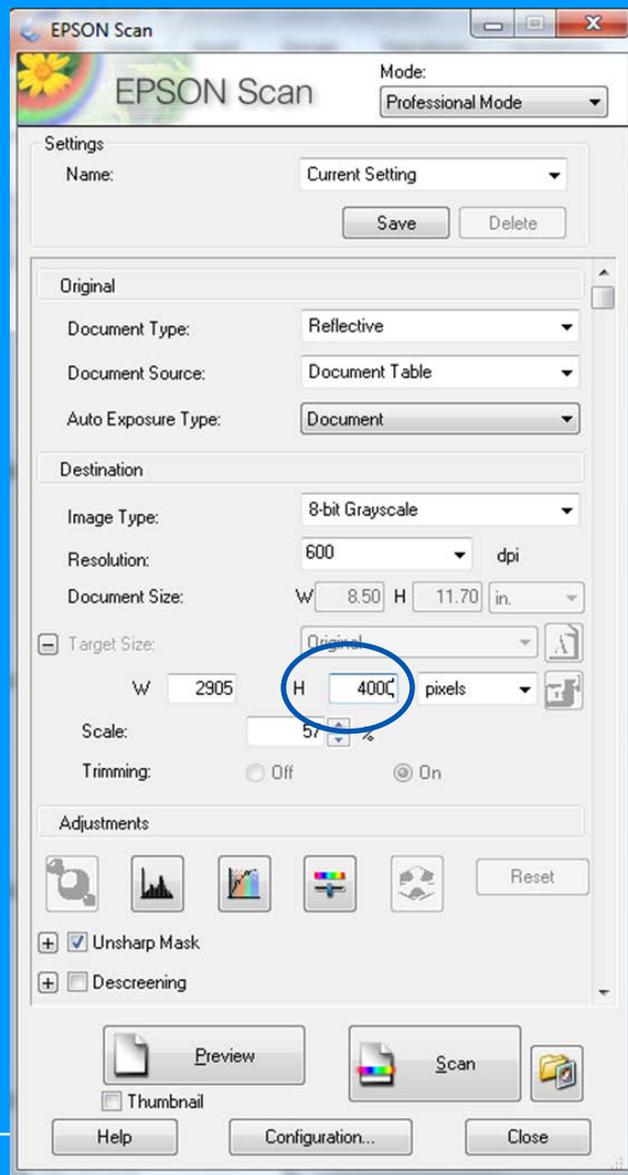
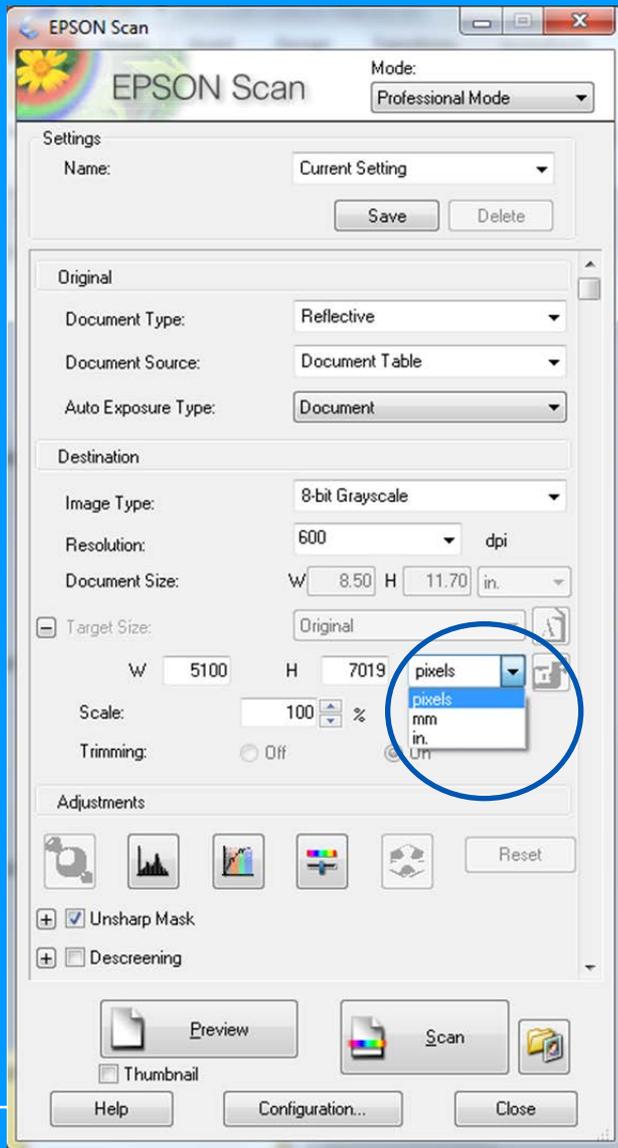
Resolution= pixels per inch (ppi)

The higher the resolution, the more pixels per inch, the more fine detail, and the bigger the file

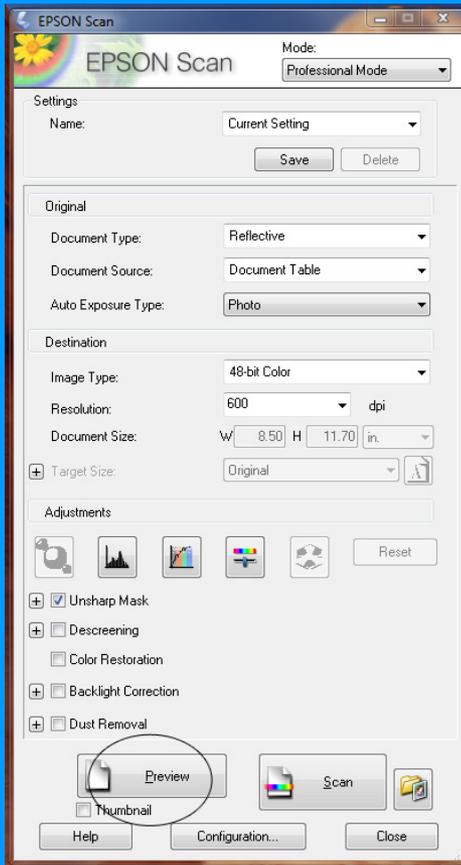


# Scanning

Step 3. Scan the documents so that it is 4800 pixels on the longest side



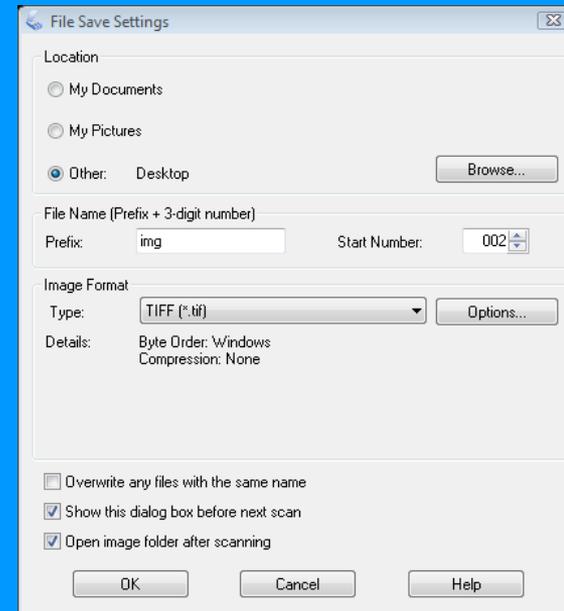
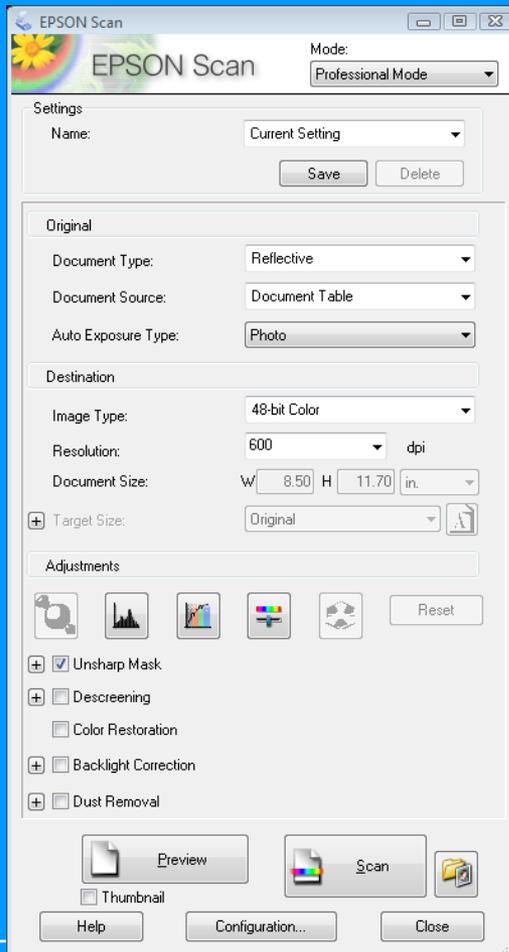
# Scanning



**Step 4.** If you can, select “Preview” BEFORE you scan. Look at the image on your screen and select ONLY the image area for scanning.

# SCANNING

Step 5. Before you scan, set your “file save” setting to **TIFF**. Then hit **SCAN**. This is your “preservation copy.”





# File Names for Digital Images

- ❑ Make them unique, descriptive, and, above all, consistent.
- ❑ Give all images from the same collection the same root file name so that you can easily locate them. For instance, images from UAA's collection with the call number HMC-0456 would all have a file name that begins "uaa-hmc-0456-...", e.g. "uaa-hmc-0456-1", "uaa-hmc-0456-2" etc.

# Storing Digital Images

- ❑ Do NOT store your scans on CDs. Why? Look right →
- ❑ Make several copies of digital images in both TIFF and JPG formats.
- ❑ Store back-up copies on external hard drives, thumb drives, and/or “cloud” sharing sites.
- ❑ Check the files every 5 years and re-save them into new formats if necessary





## Further Resources

- **Digital Preservation Best Practices and Guidelines:** <http://digitalpreservation.ncdcr.gov>
- **“Creating & Editing Digital Photos: Tips for Scanning & Restoring.”**  
[http://genealogy.about.com/cs/digitalphoto/a/digital\\_photos.htm](http://genealogy.about.com/cs/digitalphoto/a/digital_photos.htm)
- **“Scanning Software, Tips and Help.”**  
[http://graphicssoft.about.com/od/scanning/Scanning\\_Software\\_Tips\\_and\\_Help.htm](http://graphicssoft.about.com/od/scanning/Scanning_Software_Tips_and_Help.htm)
- **“Adding Descriptions to Digital Photos: Your Gift to the Future.”**  
<http://www.digitalpreservation.gov/multimedia/videos/personalarchiving-photometadata.html>
- **“Repairing and Restoring Damaged Photos in Photoshop.”**  
[http://graphicssoft.about.com/od/photoshoptutorialsrepair/Repairing\\_and\\_Restoring\\_Damaged\\_Photos\\_in\\_Photoshop.htm](http://graphicssoft.about.com/od/photoshoptutorialsrepair/Repairing_and_Restoring_Damaged_Photos_in_Photoshop.htm)
- **“Moving Theory into Practice: Digital Imaging Tutorial”** Cornell University Library/Research Department. \*This tutorial was meant for institutions looking to digitize their materials. <http://www.library.cornell.edu/preservation/tutorial/contents.html>



**Whom to contact for more information:**



archives@uaa.alaska.edu  
Archives & Special Collections  
Consortium Library  
University of Alaska Anchorage