Scanning and Archiving Your Family Photos & Documents

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November 16, 2019

SCANNERS ● SCANNING ● RETOUCHING ● STORING SCANS ● ARCHIVING PHOTOS/DOCUMENTS

Copyright. See the Legal Genealogist Judy Russell and Cornell University Library for how copyright applies to your photos and documents.
https://www.legalgenealogist.com/2012/03/06/copyright-and-the-old-family-photo/
https://www.legalgenealogist.com/2015/03/04/copyright-and-the-photo-negatives/
https://copyright.cornell.edu/publicdomain

Can you use your All-In-One? Yes, you can, but **should** you?

- Most all-in-ones scan documents and do that relatively well. They may even include OCR.
- Some include software to make minor adjustments, such as cropping and exposure.

In order to determine if you **should** use your all-in-one you need to consider:

- The resolution of the scanner and
- The quality of the optical lens.
- What you want to scan?
  - 1960's photos with color issues
  - Tin types from the late 1800's
  - Negatives or slides.
  - Old Documents and Letters
  - Very Small Photos

So, **should** you use your all in one? The answer is:

- If it has a flat-bed scanner, then maybe, and most definitely for documents.
- But **Never Ever** use a sheet-fed scanner on any photo or delicate original as it risks damaging them even if enclosed in a sleeve. The only exception would be a scanner built just for running stacks of 4x6 photo prints gently through what is typically straight thru sheet feeder.
- Your all-in-one may be fine for scanning a 4x6 or larger photos of your daughter's graduation but maybe not for the only photograph of Great Great Grandpa Joe in his Civil War uniform.

A good photo scanner should:

- Allow you to scan multiple images at one time, saving them as individual files
- Allow for high resolution scans
- Allow you to scan large images
- Allow you to save your files as uncompressed TIFF images
- And perhaps will also allow you to scan slides and negatives.
  - If you have a lot of slides or negatives to scan, there are scanners that can be configured to scan those, eliminating the need for a separate transparency scanner. Be aware most transparency only scanners are configured to scan only 35 mm slides and negatives.
- If you have only a few precious photos or transparencies to scan you might want to take your photos to have them professionally scanned. Of course, this means trusting they will not be lost or damaged. If you send them out, research your options. You want your items to stay as close to home as possible. Many companies send your photos cross country or even overseas to be scanned. The farther they are transported, the more chance for loss or damage.

Scanner Cost

- You should be able to find a good photo scanner for less than $100, but if you want to scan transparencies such as negatives and slides, the price jumps to about $200 or more.
- If you are a scrapbooker or photo buff in need of a versatile scanner and printer there are a few all-in-ones with photo-centric features that print and copy as well - costs increase as you add functions.
- A photo-centric all-in-one is not the same as the all-in-one at the office. They are made for scanning and printing photos and will do a good job on documents as well.

A photo scanner should have:

- A Flatbed for scanning
- An 8.5x11.7 minimum scan area,
- Minimum Optical resolution of 1200 dpi for photos *(dpi= dots per inch = ppi=pixels per inch)*
- The ability to scan multiple images at one time and then save them as individual files
- A USB interface

And if you **plan to scan transparencies** it should have:

    - *Reflective and transparency scanning options
    - Digital ICE based dust removal for film and
    - 2400-6400 dpi

- Based on the above, the Epson Perfection V550 Photo Color Scanner is a good choice. for about $190. It received Editor's Choice for its class in PC Magazine multiple years and takes top honors in almost every review for scanners that scan both photos and transparancies . I have the Epson Perfection V600 scanner, the only difference being the v600 will scan legal size documents and costs about $220.
- The Epson Perfection 370 appears to be a new addition to the Epson lineup and may be another viable option for about $120. It is more compact. Only has 35mm film holder. Has OCR.
- If you only intend to scan photos and documents, the Epson Perfection V39 may also be an option for about $70. Canon has a similar model, but user interface seems to be less intuitive.
- There is also a pricier Epson scanner, but it is geared more towards graphic arts.

OTHER TYPES OF SCANNERS

Hand Held or Bar Scanners

These are scanners that you hold in your hand and pass over a page or document. The quality of the scan is dependent on the skill of the user, and they only save jpg files.
With the improvement of lenses in cell phones, bar scanners seem to me to be a bit of a dinosaur.

Cell Phone

- Great for copying a passage from a book, or a receipt from a restaurant,
- Many articles say you don't need a scanner if you have a cell phone. In general, these articles are talking about document scanning as opposed to photo scanning.
- IF I had no other option, I would definitely use my cell phone to scan a photo.
- There are many apps out there, some better than others at improving the results you would get over just snapping a pic with your phone. Even better, many are free. Some help you to square up the image, and there are even some now that take multiple images from different angles, then merge the photos to eliminate glare. No surprise **Google PhotoScan** comes out on top in most

reviews. Beware, some apps save your photo as a pdf rather than a jpg, making it more difficult to enhance later. Some apps have OCR software embedded making scanned typewritten documents searchable. Make sure to thoroughly vet the app before scanning hundreds of pics only to find you can only view them on your phone, have to purchase storage, or some other gotcha.

- There are also stands that stabilize your phone improving cell phone scans. If you were doing library research and were allowed to use a camera in the facility, one of these might be useful.
- A cell phone would also work to scan a framed photo, photos in an album, or a Bible.
- Always set your phone at the highest resolution possible. You can always decrease image size later.

Flip Pal –

- A Flip Pal is no larger than a small notebook computer and allows you to scan photos in a relative's living room or on a picnic table at a family reunion. It is used without a computer and runs on AA batteries. Its main limitation is scanning resolution, which is 300 - 600 dpi, but to be honest, most scans of 3x5-4x6 photos are usually at 600 dpi.
- The screen on the Flip Pal only scans up to a 4x6, but you can make multiple scans and embedded software will stitch them together.
- Flip Pal is also great for scanning stacks of 4x6 prints.
- The new Flip Pal has a feature where you can record someone speaking and attach it to a photo file.

SLIDES AND NEGATIVES

There are also scanners made specifically for scanning slides and negatives. If you have a lot of slides or negatives these can be more efficient, but you get what you pay for. Make sure to get a unit that will provide a minimum 2400-6400 dpi dpi resolution. ICE dust removal is almost a necessity. Also make sure the scanner accommodates the format of transparency you have. Most only scan 35mm format or smaller.

PREPARATION

These are "Best Practices". If you are scanning 100-year old portraits you will likely take more care than when scanning a stack of vacation photos of South Dakota or your kids' pre-school friends.

- Prepare the area you will be working in.
- Never eat, drink or smoke around originals.
- Make sure all surfaces are clean and as dust free as possible. A perfect workspace would be a large table or desk that can be thoroughly washed and wiped down prior to use.
- Wash your hands with a soap that does not contain a moisturizer.
- A slightly cooler room minimizes moist and oily hands.
- Clean your flatbed glass. It should be spotless and free of dust.
  - Use a soft, lint & chemical free cloth, like a microfiber cloth to clean the glass on your scanner.
  - If there are smudges or other contaminants, spritz a little bit of glass cleaner made for scanners and computer screens onto the cloth and wipe the glass.
  - This process will be repeated often
  - DO NOT use anything containing the following as it may damage the scanner glass:
    - Acetone
    - Ammonia
    - Benzene or
    - carbon tetrachloride

    *Isopropyl Alcohol may be used but has a tendency to leave streaks.
- **Do NOT use compressed air or any other chemicals on the photos**. Compressed air cans occasionally will spit liquid along with the air and can damage your photo.

- Even if something is advertised as photo safe you never know how it may react with older photos.
- A small antistatic photography brush and air blower bulb can be useful to remove dust
- Brushing or dusting a transparency should be done only when absolutely necessary. Brush very gently, especially on the dull side of the transparency from the center outward.
- Keep a very fine grained, chemical and moisture free cloth available for the rare event that you need to try and remove something from a photo's surface. Use only after testing a corner of the photo with no detail to make sure the finish will not scratch.
- A 3x5 notecard can be used to remove and position items on the scanner glass
- Gloves
    - The National Archives recommends wearing white cotton gloves, when handling photos or transparencies. You can also use nitrile or latex gloves. Don't use the ones with powder inside.
    - Use of gloves with paper documents is not necessary. Just make sure your hands are clean and dry with no lotion.
    - Even though you may not see the fingerprints you are leaving behind, over time oil from your hands may show up.
    - Negatives and slides are so difficult to manipulate that you should always wear gloves.
- Always handle photos, negatives and slides by the edges even if you are wearing gloves. Finishes are easily marred.
- Respect and preserve the original order of photos and documents, it may provide clues later.
- Do not remove photos from albums unless the album is unsightly or falling apart.
- If your photos are not already sorted it may be useful to do so before scanning. Think about how you intend to file them later. Sort them by family, person, date or event.
- Sorting can also be done as you go along, but it is much easier to identify and label photos if you are working with one surname and family at a time. Sometimes you may even be able to identify people in photos that were not previously identified.

SCANNING RESOLUTION

Good Scanning Practice dictates:

"The maximum size an image can be printed is determined by the total number of pixels on a side. General guidelines are that digital images produce excellent results when printed at a size that has 300 ppi and acceptable results when printed at 150 ppi. For example, a digital image that has 3000 pixels on one side will have 300 ppi when printed with that side 10 inches long. At 150 ppi, that side of the print will be 20 inches (3000 pixels / 150 ppi = 20 inches).

Best Scanning Practice Dictates:

If the same image is created with a higher resolution that has 4000 pixels on the side, then it can be enlarged to 13 inches and still have 300 ppi for an excellent print."

http://archivehistory.jeksite.org/chapters/chapter2.htm This link provides two charts that deal very specifically with image size vs scanning resolution for historical archiving of photos and documents.

Assuming you are not scanning any **art photos**:

- Scan most photos with the premise they will be printed as a 5x7. This means a 1.5x1" photo is scanned at higher resolution than an 8x10, and typically an 8x10 or 16x20 is scanned at a lower resolution than a 5x7; however
- Scan photos with numerous subjects or a great deal of detail at a higher resolution. This allows the option of pulling individuals out of the photo later if you don't have individual photos of them or zooming in to see details such as signs, or lace.

With those criteria in mind, the following are my basic guidelines for scanning:

Document	Resolution (ppi)	
most photos 4x6 and above	600	(for most people 300-400 dpi is sufficient)
treasured photos 5x7 or smaller	1200	
larger treasured photos	600 - 1200	
small photos (wallet size or smaller) (so I can print at 5x7)	1200	
back of photo	200*	
small documents	200 - 300*	based on quality and how dear they are
treasured documents	300*	
all other documents	200*	
negatives and slides	3000 - 4000	the smaller the negative, the higher the dpi

HOW TO SCAN USING AN EPSON V550 OR V600

- Make sure the scanner is connected to your computer and turned on.
- Place photos, picture down on glass
- Open Epson Scan
- Set Mode to **Professional** (may be referred to as Advanced in other programs)
- For Photos set Document type: **Reflective**
- Auto Exposure: **Photo**
- Image Type: **24-bit Color**
- Resolution: **300- 600** or greater depending on photo size
- Document Size: ignore for now, we will set this later
- Select: **Preview**
  - The scanner will make a pass and the images should appear on your screen.
  - If you are only scanning one image make corrections before making the final scan

On the **Preview Screen**:

- If you are scanning multiple images simultaneously, select the **box in the box** and use your curser to **select each photo individually,** then Select the **All** button
- Back to the **Epson Scan Screen**
- **Open Target Size** (This is where Epson's software is really nice. Instead of having to figure out what dpi to scan each photo at based on the size of the original, you just type in the size you are most likely to want to print the photo at. Epson will scan that image so that the resultant scan is the resolution you previously specified which is typically 300 dpi. – No Math required)
  - Click on each photo individually and resize to a finished size you would prefer. For instance you can upsize from 3.5" square prints to 5" square prints. Turn trimming **OFF**. This allows you to enter only one dimension and the program will determine the other dimension. You can adjust your boundaries to delineate the size you want from there.
  - Instead of scanning the entire photo at a higher resolution you can select a cropped area of a photo to scan at the higher resolution and provide an enlargement of just that area.
  - Once you have sized each of the individual scans. Select the **All** button. The boxes around the photos should all be dashed.

Press: **Scan**

File **Save Settings Box** will open:

- Location : **Browse** and determine where you want your scans to go. I like to put them in a folder of their own called "Scans" in my Genealogy Photos folder. The labeled and retouched files will be filed appropriately later.

- File Name:
  - Prefix: the default is "**img**". You could put the **surname** you are working on here.
  - Start Number: 100 is where I typically start
  - **Image Format**: Type: **TIFF**

  Options: opens another box: **Epson TIFF Plug-in Settings**
  - Byte Order **Windows** or Macintosh depends on your computer obviously
  - Compression: Color/Grayscale: **None** B&W: **None**
  - **X** Embed ICC Profile, Press OK
  - **DO NOT CHECK** Overwrite any files with the same name
  - **X** Show this Dialog Box before next Scan
  - **X** Open Image Folder after scanning
  - **X** Show Add Page Dialog after scanning (this probably only needs to be checked if you are scanning multiple page documents), I just leave it checked as I tend to forget to recheck it when I move to documents
  - Select **OK**
  - Select **OK** on the **File Same Settings** Screen
- Once the scanner has cycled you will find your scans in your scan folder.
- A screen may come up warning you about the image size and time required to scan
  - Select: **Continue** or go back and select fewer images to scan or change the image sizes.

The higher the resolution and the larger the final scan dimension combined with the number of scans will affect your scanning time. It may take several minutes to complete the scans. Get your next batch ready to scan or start working on retouching and labeling the last batch of scans if your computer has the power to do both. Always do your retouching before labeling.

- For Documents Set **Auto Exposure** to **Document** on the initial Epson screen
- For **Newspaper clippings with photos** Use **Descreening/Newspapers.** Do not use for articles as the print won't be as crisp
  - For **Slides or Negatives**: Remove Cover on lid. Set **Document Type** to **Film.** Scan at **3200 ppi** minimum resolution.

Why scan at higher resolution

- If you plan to view or print a photo in a larger format.
- If you feel that someone might someday want to print the photo as an 8x10 or 16x20, scan the photo to accommodate the size.
- If a photo isn't of the best quality, perhaps it is creased, slightly blurry, too dark or washed out. A scan can often be adjusted to provide a better image than the original, so scan at a slightly higher resolution and if the photo can't be fixed, save it at a lower resolution.
- Higher resolution and size of original both effect the size of the file created.

Tips

- Always scan photos and documents in color, even if they are black and white or sepia. This allows a broader spectrum of tools if you choose to touch up your photos or documents. You can always save it as a gray scale later.
- Scanning with black paper behind a document may be beneficial if writing on the backside shows through.
- For flat documents or photos, make sure the paper fits completely on the glass of the scanner. The lid of the scanner can crush and crease the original if the paper doesn't fit on the glass.
- If the document is too large you can copy parts of it by overlaying a sheet of paper to cover the glass instead of pulling down the lid. Photoshop Elements and other programs have software to stitch these parts together as long as they contain at least one inch of overlap.

- A flat-bed scanner should not be used for copying books, especially older books.
    - Use book supports so the binding opens without force and the page lies flat and photograph the pages with a camera or cell-phone.
    - A flip pal can be used for scanning books as it can be placed directly on the page or the pages or the pages can just be photographed with a camera or a cell phone.

FORMAT

Photos

- Use of proprietary file types such as PSD or systems such as Lightroom may limit your ability to distribute your scans now and limit access to your files in the future. It doesn't hurt to work on your photos in these formats, but the archived copy should be in TIFF.
- TIFF, JPG and PDF should be reliable formats for at least 50 years.
- Archive all photos in uncompressed TIFF
- Tiff files are better for printing.
- After retouching your photo, resize your canvas to provide room for a caption
- Add a caption which includes
    - names,
    - place and
    - date photo was taken if known.
    - Make sure to include any information that was on the back of photo.
- It is also useful to include the size and type of original somewhere.
- Many programs have a space for notes, if not add this to your caption
- You should also include the source of your photo either in the caption or the notes
- DO NOT place caption within the actual photograph area

A number of different programs such as Google Photos, Batching programs and others may strip metadata, including the filename from an image. A caption will be visible as long as the photo is not edited to remove it.

Personal Choice

Save both the original TIFF scan and the retouched TIFF scan,

OR

Just the retouched scan.

Keep original until you are satisfied with any touch ups. If changes are simple (lighten, darken, remove dust and scratches, creases and foxing and do not change the composition, just keep the retouched photo. If retouching involves facial features (i.e. a major crease went through and eye) save both and add "r" to end of filename.

- After adding the caption and retouching the photo, save the file as a High-Quality JPG and archive the TIFF file. The JPG will be placed in a separate folder (e.g. media file for Family Treemaker and linked to people in my tree). It will also be the file I send to relatives.
- JPG files are slightly smaller in size than TIFFs, but they lose a few pixels each time the file is edited and saved. If it is just opened and closed, no deterioration of the file occurs.

Documents

- Scan documents at 200 dpi.
- Store all document scans in JPG, you don't need the detail a TIFF provides.
- The importance of the document will dictate the quality of the JPG file (low to high)
- Documents created in a word processing program can be saved archivally as a PDF as it saves the text and format specifications,
- Scanned documents saved to PDF are just images of the page.

- The format specifications can vary causing problems.
- PDFs are difficult to enhance; however pdfs may be OCR searchable.

Grayscale or Color Scan

- Scan color and sepia tone photos and documents in color
- Most articles will tell you to scan black and white documents and photographs in grayscale. If you scan them in color, you have more touch up ability. Color scans allows you to lighten or darken a document and fix any blemishes. you can later save the document in grayscale or black and white.
- A modern typewritten document can be scanned in Grayscale. Grayscale will provide a better scan than black and white. Grayscale limits adjustment features substantially.
- Grayscale images are 1/3 the size of a color file in TIFF.
- Scan in **sRGB** as it is a better color format for your archival document; RGB and its commercial cousin sRGB are expected to be reliably used for the next 50 years. sRGB is used for internet and commercial applications.
- Grayscale format: Gray Gamma 2.2. is recommended, but any grayscale color space is ok.

RETOUCHING YOUR PHOTOS AND DOCUMENTS

- Scan groups of photos and then adjust them with photo editing software.
  - Adobe Photoshop Elements & Corel Paint Shop Pro are two highly rated programs. Both are relatively easy to use and yet have sophisticated features you may eventually want. Vivid Pix is a newcomer. It has received accolades from the genealogical world. I believe it relies highly on auto correction tools. There are many programs that would likely work very well for you, in fact you may already have something on your computer that will provide basic photo manipulation. Microsoft office includes a program called Photos. It has some very basic tools. Photopea is a free program that I understand has a similar feel to Photoshop Elements. The free version does have adds.
- Scan photos with similar color characteristics together. When laying your photos out on the scanner glass, don't mix and match black and whites with color photos. If some photos are quite dark or you have some tin types or sepia toned photos, batch those separately. It allows the scanner to do a better job and will make touch ups easier as well.

Fading and Exposure

- Whether your photo faded over time or was just over or underexposed when it was taken, adjustment to correct the exposure may bring out the details in a photo.
  - The **Auto Adjust** feature found in many programs may be sufficient but the histogram provided in more robust programs tends to provide superior results.
  - The Histogram In Photoshop Elements is found under the **Enhancement Tab** along the top. Select the **Adjust Lighting** Tab, then the **Levels** Tab. From there you can adjust the histogram to center the histogram between the sliders. You can also adjust the center slider to lighten and darken the scan. On color photos, the eye droppers can also be used to adjust shadow, mid-tones and highlights. You can move things around until you get the effect you want.
  - If you don't like the results you can always **EDIT>REVERT** to return to the original scan.

Color correction is possible by using the **auto adjust** for color found more robust programs.

- More precision can be had using color level adjustments.
- The latter can be time consuming and takes some practice.
- **Color Cast** Removal is the easiest color adjustment to use. Early color photos that have an orange or green cast can be adjusted using said tool.

- Some programs give you a choice of specific adjustments: more green, more blue, more red etc. These are basically filters. They seldom do much for a colored photo. They can be used to adjust sepia photos or in creating a sepia tone out of a black and white photo.

Remember – You can always **EDIT> REVERT** back to your Original Scan up until you SAVE your Image, so play around with the slides and droppers to see how they change things.

- **Digital ICE** can be useful on transparencies if it is included in your scanner software. It is applied during the scanning process. It does slow the process. Scan the image with and without digital ICE and compare the images. Sometimes ICE can cause image degradation.
- Dust correction filters can also be used. These can cause some distortion as well, so check the before and after to choose which is best.
- I typically just use **Spot Correction**
  Blemishes, creases, foxing & scratches on a photo can be corrected using one of two tools found in more robust photo editing software. In Photoshop Elemenst they are found in the tool bar along the left side of the screen:
  - Stamp brush: copies pixels from one place to another
  - Healing brush: samples adjacent pixels and restores pixels within the brush to match
    You can choose the size of the brush by pixels and the amount of feathering. This enables you to fix large areas with foxing or scratches or minute areas such as a crease or small spot on a face.

Tutorials

Photoshop Elements 12 Training Tutorial – How to Restore and Repair an Old Black & White Photo, Simon Sez IT, Dec 3, 2013
www.youtube.com/watch?v=fs-FDnFhI78&index=9&list=PLzj7TwUeMQ3iroIQN0djpJxaweyp7wlQx

How to use the Clone Stamp Tool in Adobe Photoshop Elements 2018, Simon Sez IT Jan 30, 2018
www.bing.com/videos/search?q=simon+sez+it+photoshop+stamp+tool&&view=detail&mid=C928AA2A7531E91745F2C928AA2A7531E91745F2&&FORM=VDRVRV

When to use Clone Stamp vs. Healing Brush, PHLearn, March 13, 2013
www.bing.com/videos/search?q=photo+Elements+2018+healing+brush+&&view=detail&mid=3AFF88F32C3BC37416693AFF88F32C3BC3741669&&FORM=VRDGAR

Photoshop Elements tutorial: Correcting lighting with a Level adjustment layer, Lynd.com, LinkedIn Learning, Nov 13, 2012
https://www.bing.com/videos/search?q=adjust+lighting+tool+screen+photoshop+elements&&view=detail&mid=E2056BD1AC17855C18A8E2056BD1AC17855C18A8&&FORM=VRDGAR

PHOTOS WITH MATS

Personal Choice:

Whether you include the borders or mountings around photos or not is a personal decision.

- Always leave at least a small border of white around an image if possible as this can assist in color adjustments later.
- The size, border and/or mounting may help to identify when the photo was taken.
- The name of the photographer and place may be included on the mounting as well.
- Looking up the photographer may help to identify approximately when a photo was taken.
- Notes on the back of a photo should be included in the photos metadata and in the caption below the picture. Scan the back if there is any information on it. Use a lower resolution for this scan. Color and exposure correction may help here as well to bring out difficult to read writing.

FILING

Before you start scanning give some thought as to how you want to organize your scans and originals, by surname, event, date… Also decide how you will name them.

File Name

- My preference is to name scans by surname, given name and date if known. I do not use a comma between the surname and given name. For a married woman: maiden name, gjven name, married surname, nee date. I may add wed or grad as well. Family group: use the main surname and then others if not too many.
- Include captions at the bottom of the photo below the actual scans so the labeling is always attached to the photo no matter what.
- Per NARA Limit file names to 31 characters including the extension (I have not had issues with longer names)
- Use only alpha numeric characters without punctuation or symbols. NARA says to use underscores instead of space, although I have had no problem with spaces or commas. But some programs may be sensitive to spaces and commas now or in the future.
- Avoid duplicating file names by using a numeric date. You can also add numbers to the end if you have multiple photos of the same person on the same date or don't know the date.
- When scanning the back of the photo, duplicate the file name and add "b" to the end.

Add metadata tags to your photos so they are more searchable. Try to include:
Who What When Where Photo size Type of photo From whom you obtained the photo
Any additional notes on the back of the photo should also be added to your metadata if possible, as well as any editing you did to the photo.

Organization

- I used to have my photos broken up into about 20 surname files. That got complicated
- I consolidated the files and now have only four genealogical photo files:
- Genealogy >Photos>Siems
  >Terry
  >Washburn
  >Brown This reflects how I have my trees broken up.
- Store the TIFF images in these photo files.
- Store your JPGs and PDFs separately. I use the media file for my genealogical program (FTM). The files are linked to individuals in their respective trees. I can go directly to the media folder and retrieve an image, or I can open FTM and pull up the individual to find all photos with that person. It is still a work in progress, but that is my ultimate goal.
- Determine what works best for you. A system that works for 50 photos may not work for 500 or more. Be optimistic and keep it simple. The more complicated the harder it is to find things.

****In FTM you can **privatize** a photo so even if you are syncing with Ancestry.com the photo won't show up there. I would imagine other programs allow you to do the same. This is especially **important with photos of or including living people.** You would be amazed at how many names I have been able to fill in on my tree from photos found on ancestry.com. Be careful what you post on public forums!

BACK UP

- Back up frequently while you are working, at least hourly.
- When you have finished scanning and retouching create <u>at least</u> three copies.
- For example:
  - Primary Copy – on your computer
  - Backup Copy on an external drive by your computer
  - <u>One backup copy should be stored off site from the others</u>.

Perhaps on an external drive in a safe deposit box, in your desk at work or at a relative's home. (I keep a hard drive at my mom's in California that I switch out with an update when I visit her).
- In addition, it is a good idea to have at least one copy in the cloud.

Consider giving one or more copies to people interested in your archived photos & documents.
The more copies you have out there, the more likely your photos will be there for future generations.

- Electronic storage devices degrade over time and formats change, replace your hard drives at least every 2-4 years and bring the format up to date. The time can be adjusted based on the reliability of the media.

RESIZING FILES

Resizing Individual Files

You can resize an individual photo in Photoshop Elements using the Image tab along the type. RESIZE>IMAGE SIZE. Select SCALE STYLES, CONSTRAIN PROPORTIONS AND RESAMPLE IMAGE then change the Width OR Height and/or Resolution.

Resizing Multiple Files

Occasionally you may need to resize a group of photos, perhaps to send them with an email, for a website or for a photo frame. FastStone Resizer is a free downloadable program that does this efficiently. http://faststone.org/FSResizerDetail.htm

FastStone also allows you to add a watermarks along with a few other batch related fixes . Before batching your photos, copy your scans to a new folder so that nothing happens to your original scans. Once you have completed batching, you can delete the copies.

STORING ORIGINAL DOCUMENTS AND PHOTOS

https://www.archives.gov/preservation/family-archives

To reduce the risk of damage from water, insects and rodents store items:

- Out of damp basements, garages, and attics
- Away from sources of leaks and floods such as pipes, windows or roof leaks
- On a shelf so that if a pipe breaks or a room floods, they won't get wet
- Away from food and water which attract insects and rodents.
- Away from heating and cooling vents, direct sunlight. Areas near laundry rooms, bathrooms or outside walls should be avoided. A closet in an air-conditioned room is a good bet.

Humidity and Temperature Parameters

- The lower the temperature, the longer your items will last. At a minimum maintain a temperature below 75 degrees to prevent chemical decay and reduce insect activity**.**
- Keep the relative humidity below 65% to prevent mold growth and reduce insect activity
- Humidity below 15% can cause brittleness
- Temperatures closer to 68° F and relative humidity between 30% and 40% are much better.
- Do NOT store your documents and photos in a basement, attic or garage that is not temperature and humidity controlled.

Document Storage

- Papers and photos should be stored flat, not folded or bent to fit inside a box. If stored vertically, spacer boards should be used to keep items upright.
- Papers and photos should be stored in folders or sleeves that completely contain them. If the sleeve or folder is too small, edges may become crumpled and creased over time.
- Storage containers should not be overstuffed.
- Folders or boxes should be made of stock that is lignin free and acid free or buffered.

Photo Storage

Albums

- The cover of the album and the binding are of little consequence. Choose the style you like.
- Album pages and other materials in direct contact with the photographs and documents are critical. Use pages or envelopes that are acid free, and sleeves made of a photo table material such as polyester, polypropylene or polyethylene
- Do not overstuff albums
- Do not add too many items to the page or too many pages to the album. This can cause damage to the pages and the attached items, as well as pose handling issues.
- The safest method of mounting is without adhesives.
- Use photo corners made from acid free paper or stable plastic films such as polyester, polypropylene or polyethylene
- DO NOT USE materials that can cause physical damage, discolor over time or are difficult to remove such as:
    - White glue
    - Hot glue
    - Rubber Cement
    - Magnetic Albums
    - Rubber bands
    - Tape unless specifically deemed archival
    - Adhesives with unknown characteristics
    - Non-stainless-steel staples or paper clips
    - Unknown plastic or polyvinylchloride (PVC)

Photographic sleeves and boxes

- All items coming in contact with your photos should have passed the PAT test, which basically means they have been tested and proven not to interact with the chemicals in the photographs https://www.imagepermanenceinstitute.org/testing/pat
- If your original documents are brittle, torn or heavily used place each in a polyester L-sleeve. These sleeves reduce tears and other potential damage
- Only place one item in a sleeve
- Use sleeves that are larger than the original
- Don't use sleeves on book pages while pages are still in book.
- Do not store photos & documents in same box or album with negatives.
- Negatives can release gases that affect paper
- Most black and white negatives from the 1900's should be placed in sleeves with openings on both ends as these negatives give off more gases than others
- Clear sleeves are preferred if item is to be handled and/or looked at with any frequency. Professional archives often prefer paper envelopes rather than clear sleeves for items handled infrequently. Paper allows gases released by the item to escape. The paper can also be buffered to neutralize acidic gases.

Cold Storage

Acetate negatives and color negatives, slides, and prints are vulnerable to fading and deterioration within decades, if stored at room temperature. Cold storage is a bit over the top for most items, but it can slow this deterioration. You can find information on cold storage at https://www.nps.gov/museum/coldstorage/html/index.html

Exposure to light can cause

- fading,
- darkening and
- other changes.

It is best to display copies of the original and keep the original stored safely.

DISPLAYING PHOTOS AND DOCUMENTS

- If you must display the original
- Avoid daylight and fluorescent lighting
- Limit the time and intensity of exposure
- Use matting made from cotton rag or 100% chemically purified pulp
- Use matting that is buffered or pH neutral/acid free
- Use matting has passed the PAT test (if framing photos)
- Hinge the original to the backing mat with
- Japanese paper hinges adhered with wheat starch paste or methyl cellulose
- Use corners of paper or inert film only if no adhesive is touching the original
- Cover with either UV filtering glass or acrylic. Do not use acrylic with pastels or other powdery media.

ADDITIONAL SOURCES:

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