- PHOTO QUICK-LOOK Part 2 STORAGE AND TRANSFER DIGITAL PHOTOGRAPHY - "Beyond The Shoebox or Album On The Closet Shelf" What do we get using "PHOTOS" ? - Apple's Digital Photo Management App Storage Management ▼ Single or Multiple Libraries "In Library" or by "Reference" Easy Access - Main Index by Date/Time "Photos" automatically groups photos/videos by: - Memories - People - Places - Favorites - Imports - Recent Deleted "Photos" allows review by "Type" - Video - Selfies - Live Photos - Portrait
 - Long Exposure
 - Panorama

- Bursts
- Screenshots
- Animated
- Raw
- "Photos" Offers Albums and folders for:
 - Events, Subject Identification, Other (temp slideshow/project storage)
- Photos supports Titles, Captions, Keywords
 (more below)

Editing Tools

Stay tuned for Part 3

- What's the difference between photo formats?
 - JPG/JPEG (Joint Photographic Experts Group) is a form of lossy compression - invented in 1982 first pub in 1992
 - Good for photographs typically having soft, low contrast transitions
 - Digital photography was just getting underway and photo files were LARGE.
 - TIFF Tagged Image File Format) is a lossless format with a wide range of options.
 - very large files
 - TIFF is useful as a generic format for lossless interchange between professional image

editing applications.

little support in applications not
 concerned with image manipulation (such
 as web

browsers).

 PNG (Portable Network Graphics) is a lossless compressed raster graphics file format.

developed in mid '90s to circumvent"GIF"'s patents

- widely used for web graphics

- It supports up to 48 bit color.

 It can also contain an additional data layer (alpha) for transparency/opacity control.

 RAW is a lossless format which captures information directly from a camera sensor with little or no manipulation.

- VERY LARGE files

 Exposure and color correction is applied during a development stage to meet standards

> All camera sensors are different in their reaction to image forming light/ colors. This caused chaos in the early days of digital photography. Every camera's photos of the same scene

looked different and photographic "prints" could hardly be made. Standards were established to ensure that a red/green/blue target looked the same regardless of sensor. This is done via mathematical manipulation of the RAW sensor data

 HEIF - High Efficiency Image Format - a new lossy image format capable of compressing at about twice the efficiency of JPG at similar quality.

> Less space per photo and greater adaptability to multi image needs such as HDR.

HEIC - High Efficiency Image Container.

- This holds the HEIF files along with metadata AND editing information so that "original" data is always available for reversion - while all in one neat package!
- ▼ CAUTION:

Shooting in RAW's 12 Mpixel format uses about 24 Mbytes per photo. Using the 48 Mpixel format found in iPhone 14 results in 90+ Mbytes photos. (about 10 to 40 pictures per Gigabyte.) A similar JPG file might be 1 to 2 Mbytes.

- Is "iCloud Photo Library" a good service to Use?
 - ▼ Good:
 - ALL your photos show up on all your devices.
 - Editing a Photo on any device shows up on all devices.
 - Purging Photos on any device also removes them from all devices
 - Quality is high (HEIC) on all devices*
 - * May not be if using "iCloud for Windows" on a PC

Bad:

- ALL YOUR PHOTOS SHOW UP ON ALL YOUR DEVICES!
 - You cannot, say, just have "Recents" and "Favorites" on your phone
 - Can be difficult to find the photo/s you want
 - You probably have to pay Apple a monthly amount depending upon your storage needs
- Caution:
 - If you throw away photos from any device you delete them from all devices
- With or without "iCloud Photo Library" your Mac will likely be the editing device of choice.
 - Macs bigger screen and easier to use tools make it the editing choice

- Maintain the convenience of a simple "touchup"
 editing on your phone & pad
- You can easily transfer photos from your Phone or Pad to the Mac
- If not using "iCloud Photo Library" How can we transfer photos between devices"?
 - Air Drop
 - Make sure it is "on" on both devices (settings)
 For highest quality, be sure to engage "Transfer Originals" in Photo's settings"
 - Plug iPhone into computer
 - If using "Photos", the name of your phone/ pad will show in the app's sidebar
 - All photos on your phone will show up in the "Photos" app in the familiar "Import screen. Import as desired directly into the Library or into a new or chosen album.
 - If using "Image Capture" all of the images on your iPhone will show in a separate
 - window. You may select and import them directly into "Photos" or into a folder of
 - your choice.
 - CAUTION: This has no relationship to the "Finder's" ability to sync and backup files TO your iPhone/iPad.
 - ▼ Use "My Photo Stream" **** APPLE IS IN THE

PROCESS OF DISCONTINUING ****

- "My Photo Stream" characteristics?
 - Functionality:
 - When turned on, on your various photo devices, photos taken (or imported) on any device will automatically appear on the other devices signed into the same Apple ID. This is of great convenience.
 - When a photograph is deleted from the photo stream it will be deleted from "My Photo Stream on all devices"

Idiosyncrasies:

In macOS, photographs from "My Photo Stream" are automatically added to your (All Photos) Library. In iOS and iPadOS the pictures will show up in the "My Photo Stream" album. If you want them in the Library, YOU have to move them there.

Caution:

- Photo's in your iPhone/iPad/iCloud are transferred and stored as HEIC files (Good)
- Photos on your Mac are converted/

transferred and stored as JPGs for compatibility reasons (with iCloud for Windows)

- THE QUALITY OF PHOTOS TRANSFERRED TO YOU MAC via "MY PHOTO STREAM" ARE OF SLIGHTLY LOWER QUALITY SINCE THEY ARE FIRST COMPRESSED AS HEIFS AND THEN CONVERTED TO JPG.
- For the absolute best quality,
 transfer relevant photos by AirDrop or
 wired connection.

Caution #2:

- Although all photos are transferred, all device Libraries are still independent. If you edit on one device, the edits will NOT show up on other devices. If you store photos in albums, it, like wise only happens on the single device. Goes for photo deletion too.
- "My Photo Stream" usage pluses and minuses
 - Plusses
 - No Cost
 - Automatic (if turned on) transfer of

new photos from your phone/pad

- Independent Libraries (chose what remains on your Phone)
- Minuses
 - Additional manual transfer of photos
 to your Mac may be necessary for
 highest quality.

Email or iMessage

- Effective method of transfer but only for a very limited number of pictures
- On a Mac use the "Share" pane or drag-anddrop from "Photos" to email

Total size of email could be a problem.

 Plug a "flash drive" or "hard-drive" into your iPhone/iPad

- You will be transferring from the "Photos" app to external drive via the "files" app.
- Generally speaking you may need a USB to lightning adapter and a power supply
- If your devices in question both have USB c ports you can directly plug them together.
- Caution: This is not the most reliable method of transfer. If this method is to be routinely used, I recommend using a small capacity (250 Mbytes or less) SSD drive
- Photo Organization Options

- Using albums and folders.
 - ▼ Why?
 - To make it easier to find related photographs
 - There is no limit to the number of albums, and albums can be within "folders"
 - For instance you can have a Folder titled "Vacations" and within it can be albums for each vacation you have taken. Same with a Folder called "Family" and the albums with it having the names of relatives.
 - Contents of albums can be sorted manually or by name of date or...
 - Albums are not stored
 alphabetically but arranged in the
 order you want them
 - They make it easy to highlight some photos, even if only for temporary usage.
 - Albums take almost no additional storage space - they don't duplicate photographs
 - If you delete a photograph from an

album it remains in the Library.

- Albums can be thrown away with no
- adverse effects on the "Library"

Why Not?

- Lazy
- "Photos" app search is good enough. (try it)
- I use "keywords" and titles on all my photos.
- macOS
 - How?
 - Chose related Images
 - Click on "File" in the menu bar
 - Chose "New Album with Selection"
 - or
 - To create a new empty album start
 with no images selected and then
 chose "New Album" which will
 appear in the left sidebar ready for
 you to name it. Then drag-and-drop.
 - The very similar process can be followed to create new folders
 - There is also a shortcut by clicking on the plus sign (+) to the right of the

words "My Albums" in the sidebar (it is difficult to see until touched by mouse pointer)

- ▼ iOS/iPadOS
 - Using albums and folders in your "Photos" Library (similar to macOS but more limited)
 - Let's play a bit
- Using Keywords in your Photos Library (only macOS, not iOS or iPadOS)

▼ Why?

- Easily search your entire Photo Library for descriptive "Keywords" you apply
- Multiple Keywords can be applied to photos (ie: flowers, 3 Star, red)
- Keywords are easily removed
- Create Keywords
 - Easiest way to create a NEW keyword is using the "Info" dialog - "Add Keyword" (command + i)
 - Keywords are stored in the "Keywords
 Manager" (command + k)
 - Best for creating multiple keywords or editing them
 - Use "Quick Group" to assign keywords to photos via shortcuts

- Great when used with "Smart Albums"
- Why not?
 - Keywords that you create on your Mac
 - don't appear in Photos on your iPhone or
 - iPad. (but you can search for them!)
 - Just one more thing to remember 😏
- Using SmartAlbums (only macOS, not iOS or iPadOS)

Why

- Let your computer do most of the work
- automatically gather and display photos
 from your library that meet criteria you
 specify. (keywords or dates or...)
- ✓ Why Not ?
 - Smart Albums that you create on your Mac don't appear in Photos on your iPhone or iPad.