Image File Management

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Image File formats

Raw file ; lossless

- Canon: CR3
- Fuji: RAF
- Nikon: NEF
- Olympus: ORF
- Panasonic: RW2
- Sony: ARW

TIFF or TIF *Tag Image File Format* (1986)

- lossless; some types are proprietary; developed by Aldus/Adobe
- Can be compressed (LZW)
- Can contain layers
- Large!

DNG *Digital Negative* ; generic RAW (2004)

- lossless; universal; developed by Adobe

PSD *Native Adobe Photoshop File Format* (1990)

- lossless
- Can be compressed (LZW)
- Can contain layers
- Large!

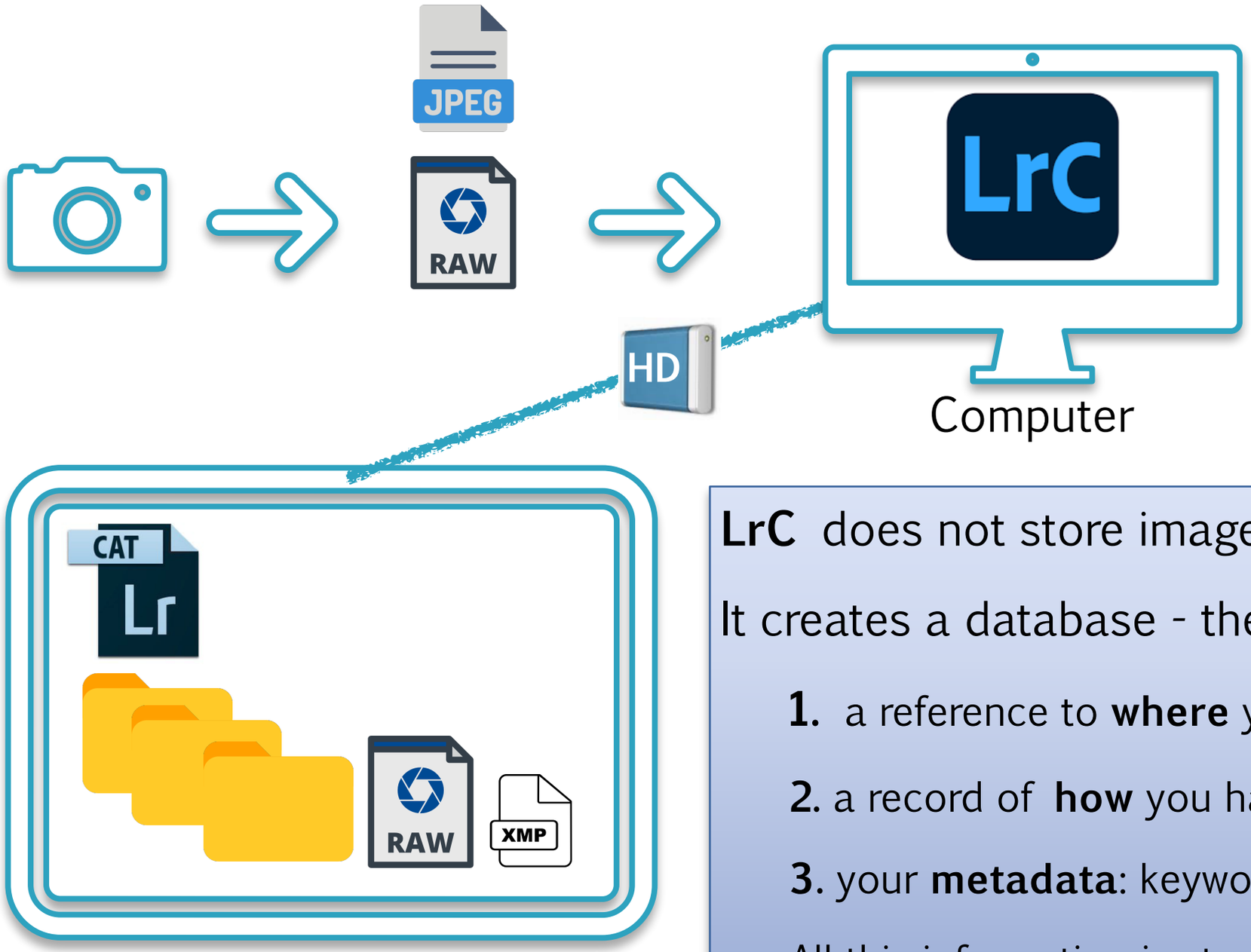
Jpeg or Jpg (1992)

Joint Photographic Experts Groups

- Lossy format (10x compression)
- Small !
- But low resolution ….

A jpeg image of a European wildcat with the compression rate increasing (righ-to-left)

How Lightroom Classic works



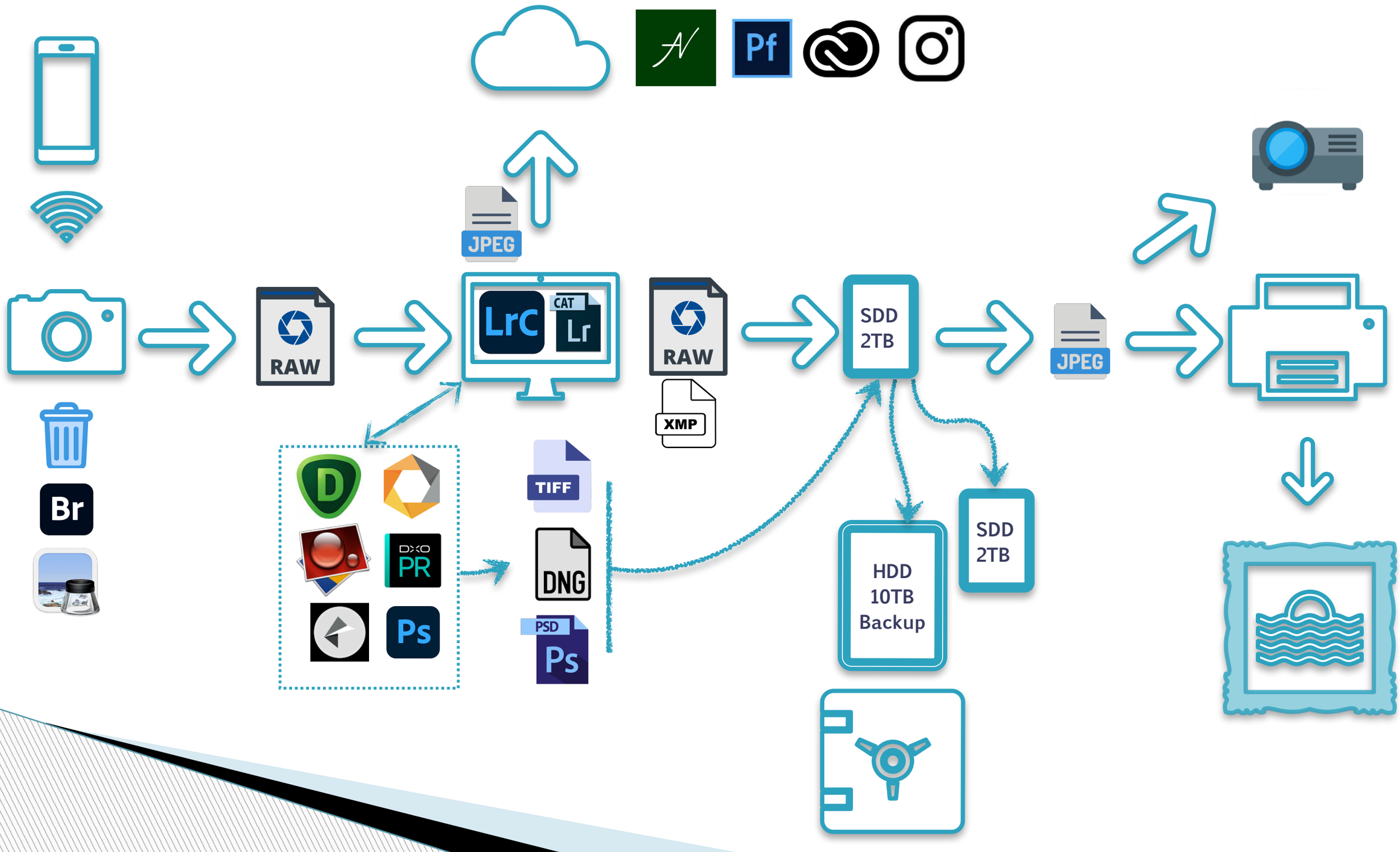
LrC does not store images

It creates a database - the **catalogue**, which contains:

1. a reference to **where** your image file is stored
2. a record of **how** you have processed the image
3. your **metadata**: keywords, ratings, flags, etc

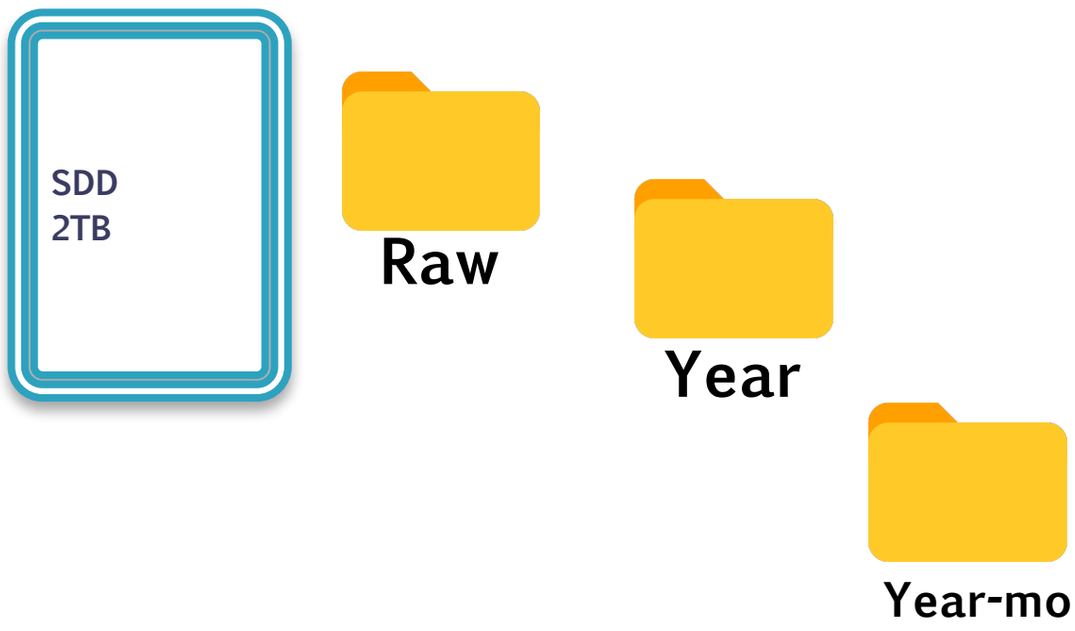
All this information is stored in a .xmp (*side-car*) file

My current digital image workflow



Importing Images into LrC

- We recommend using LrC to import your images from camera or memory card
  - This will help you to…..
    - Create a new folder or put your images in a folder which already exists
    - Give your images a meaningful File Name (e.g. related to event)



Year-month-day-Event1_Img1
Year-month-day-Event1_Img2
…

Importing Images into LrC

- When you import an image onto your computer using LrC … BEST PRACTICE
  - Image itself is not imported into LrC
  - Image itself is imported into “My Pictures” or whatever folder you store your images in your computer

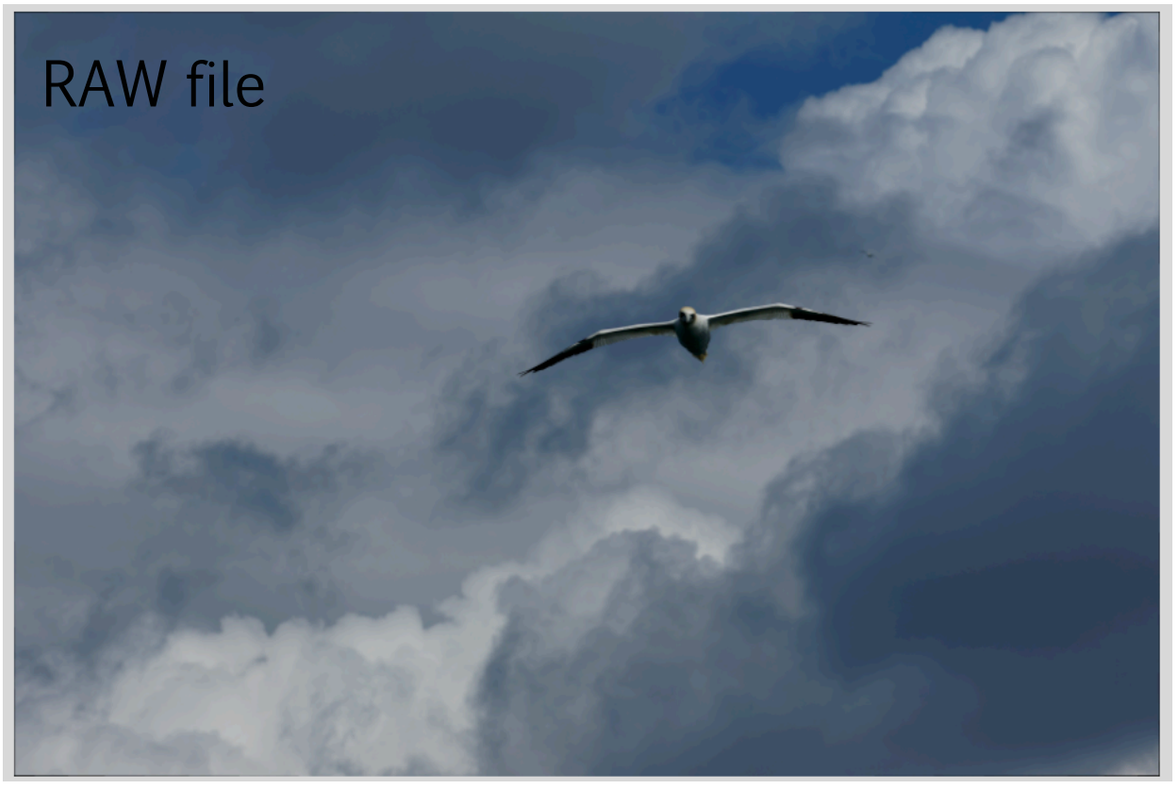
  - Lightroom “views” your images
  - When image is edited in LrC, it creates a file of changes which is stored within or beside your original image called an **.xmp** file (sometimes called a Sidecar File)
    - Original file in My Pictures is not altered
  - When you view your image in LrC, you are seeing your original image plus the changes/edits you have made in LrC

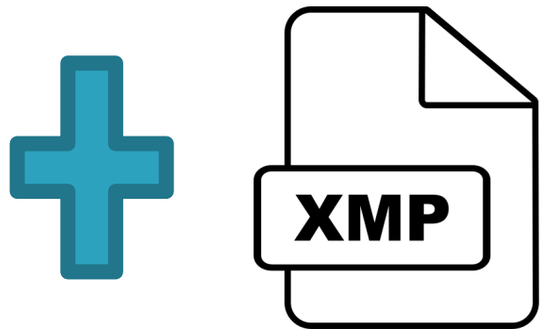
Catalog/s in Lightroom

- A **catalog** is a database that tracks the location of the photos you are viewing in LrC and information about them
  - When you edit photos, rate them, add keywords to them, or do other things to photos in **LrC**, all those changes are stored in the **catalog as is location of .xmp file**.
  - The original photo (RAW) files themselves are not touched.

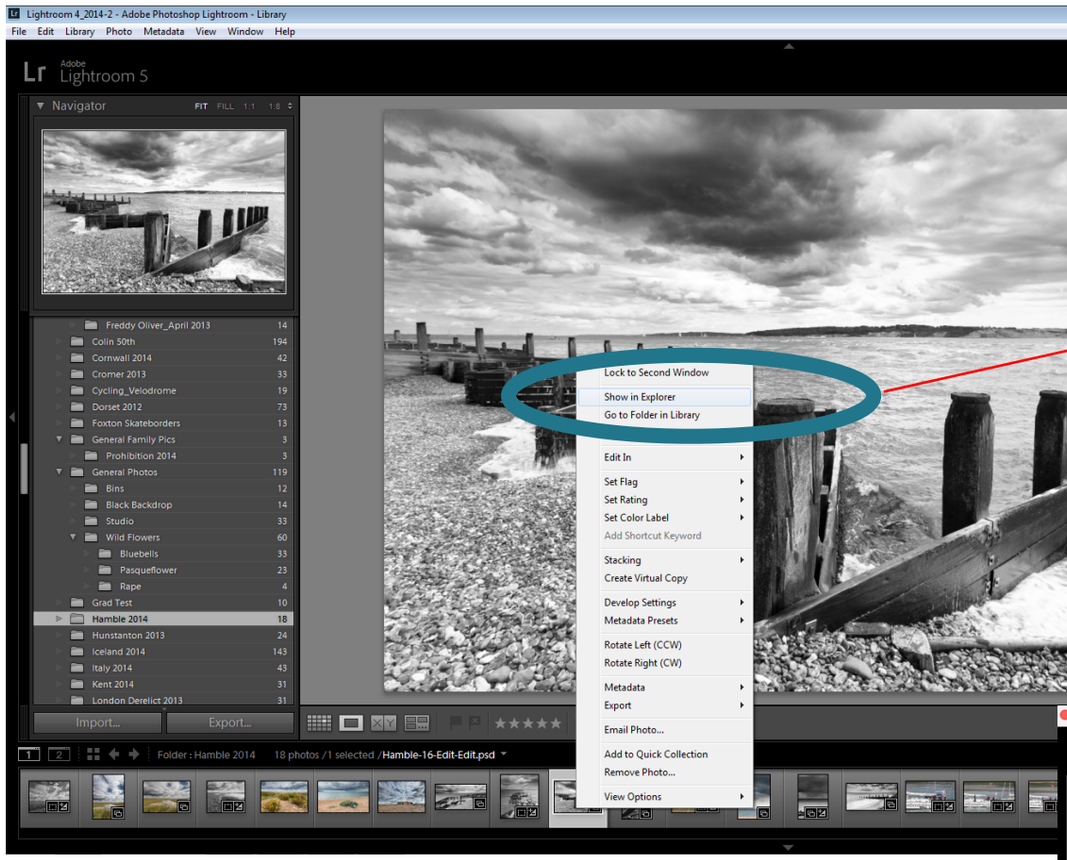
.xmp Files

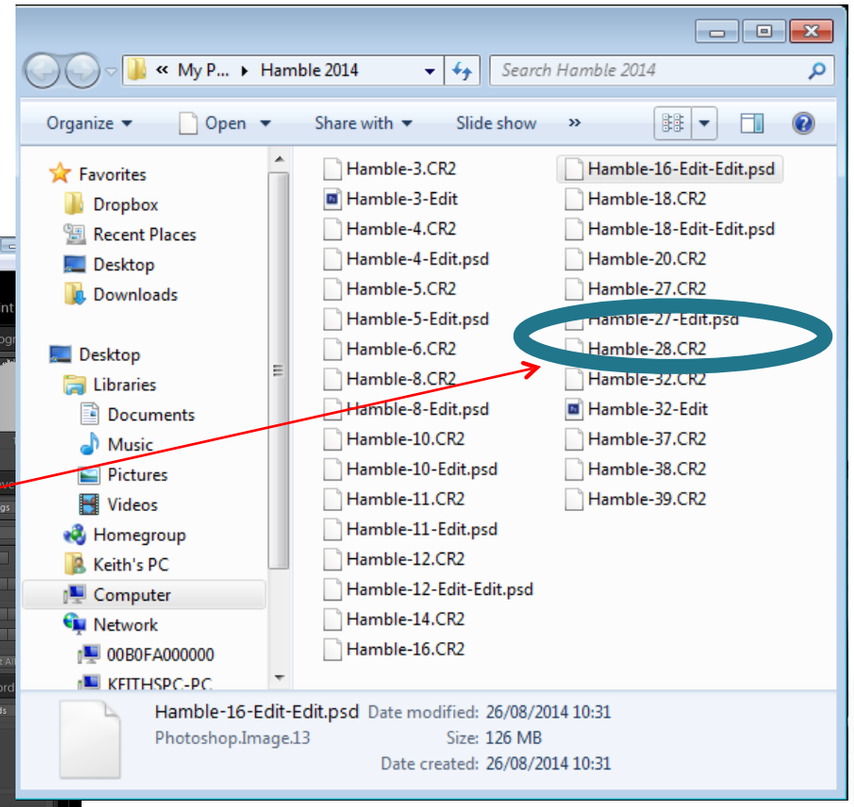
Dependent on settings and file type, you might or might not “see” the .xmp “sidecar” file in your hard drive - don’t worry about this, LrC takes care of it !



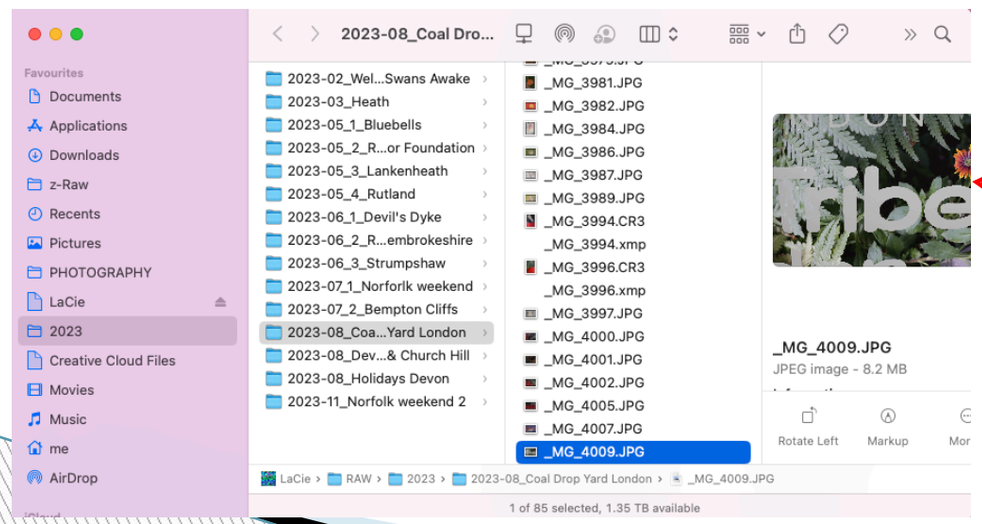


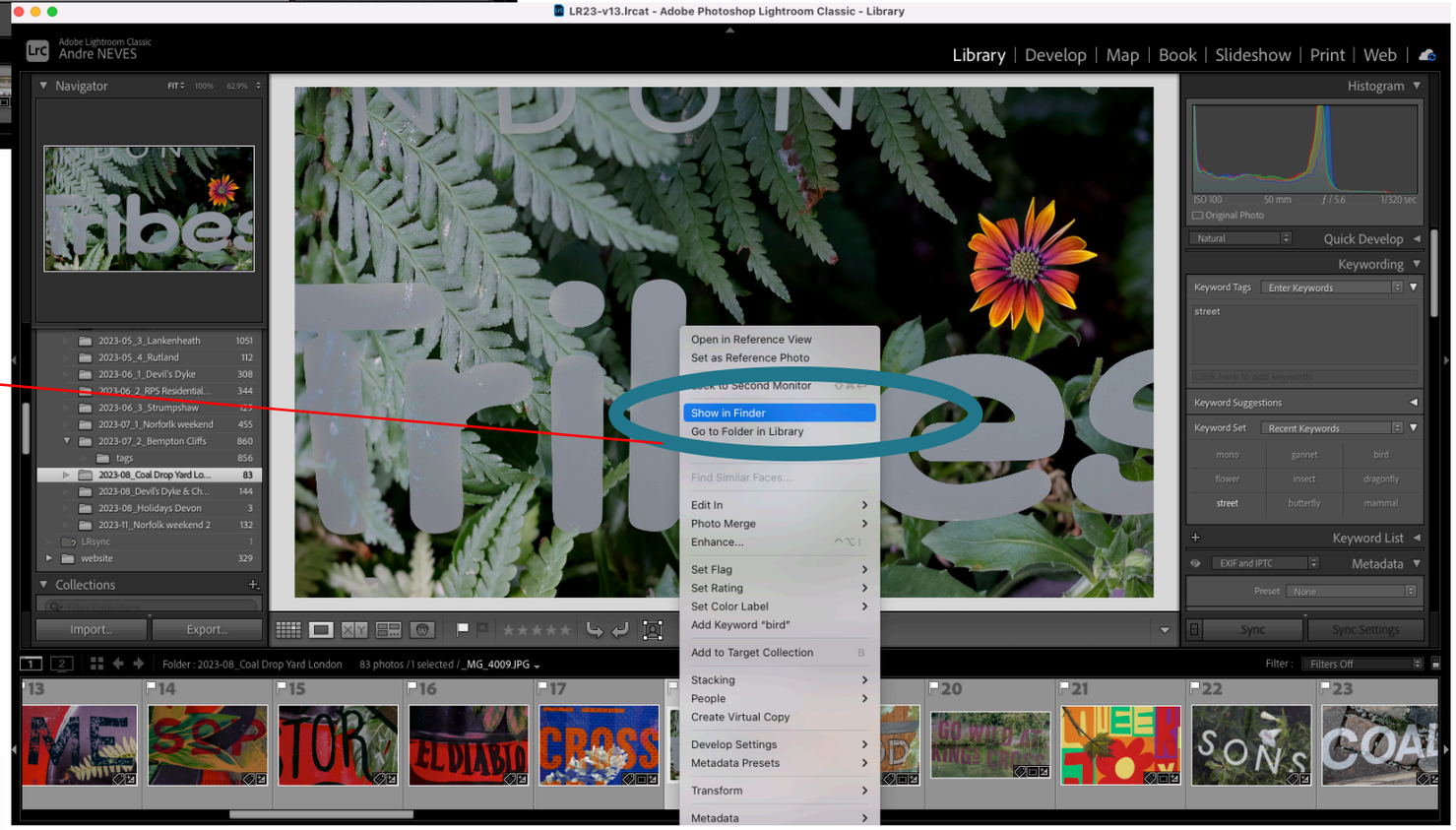
Location of images





PC

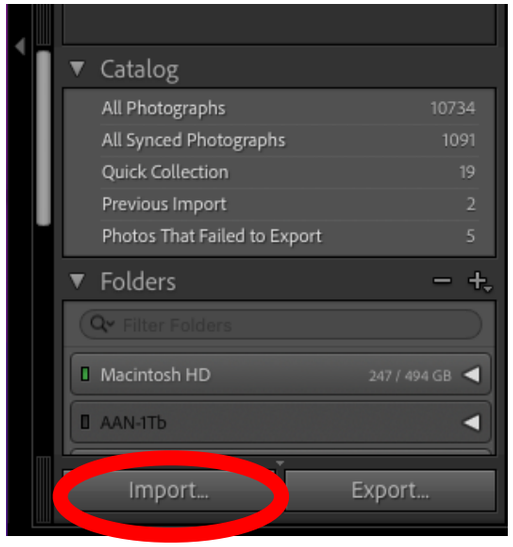




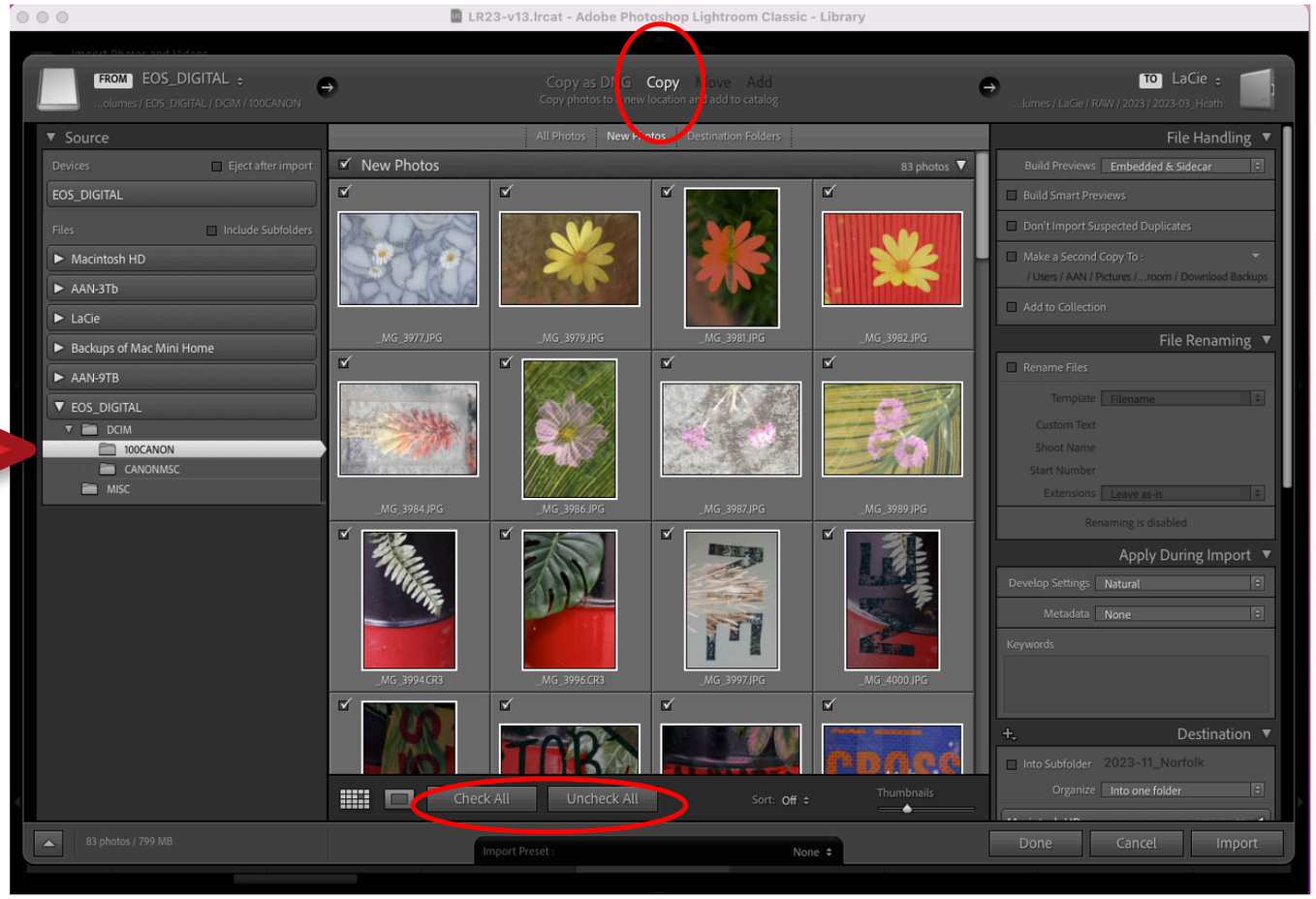
Mac

File import into LrC

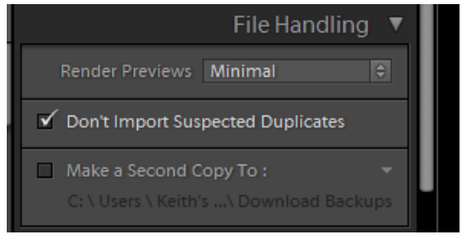
- Attach camera to computer and switch camera on
- or insert memory card in reader
- Click "Import" in Library Module of LrC

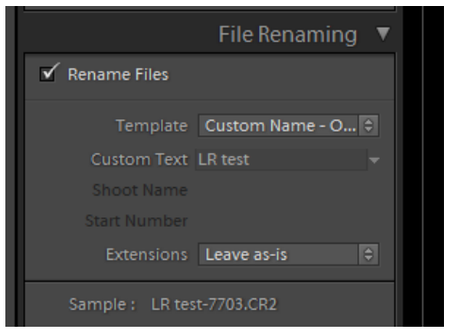


- Dialogue box will open and your camera or memory card reader should be listed as a Source
- Click on your camera source and all photos on camera or memory Card will be shown
- Click on Copy in the middle top of window
- Next select (by Checking or Unchecking) the photos you wish to download onto Computer and view in LrC



File import into LrC





<u>File Handling</u>
Click "Don't import suspected duplicates"

<u>File Renaming</u>

Generally you will wish to give your filename a more useful name

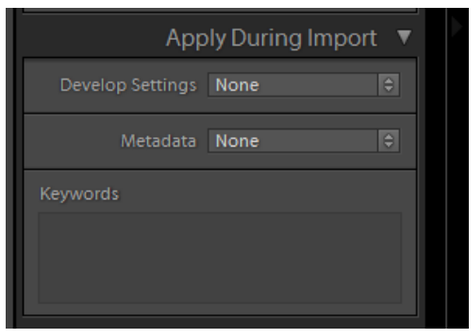
Tick Rename File box

Use Custom Name-Sequence template

Type in the Text for the way you want the filename

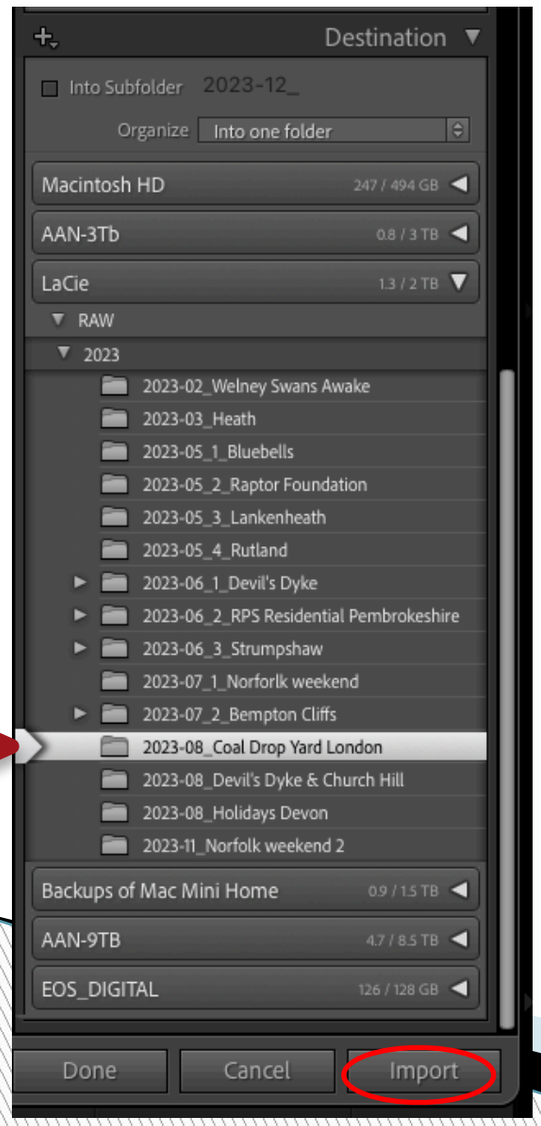
Extensions - Leave as is (that way, if the files are raw, they stay raw, if they are jpgs, they stay jpgs etc)

<u>Apply during Import</u>
No need to do anything here



Destination- where do you want your images?

- You can either….
  - Create a new folder using LrC within \My Pictures OR
  - Add images into an existing Folder on your Computer



- Destination - setting this correctly will ensure the imported photos go into the right place on your hard drive
- In this example, I'm importing some new photos into an existing folder in my 2023 folder called "2023-08_Coal Drop Yard London"
- I have unticked "**Into Subfolder**" as I don't need a new folder
- To create a new folder, I would choose the target folder by clicking it first, then tick "Into Subfolder" and then type a new name for it in the **Organize** box
- Lastly click **Import** button (lower right)

Files in “2023-8_Coal Drop Yard London”
Stored in external SSD drive

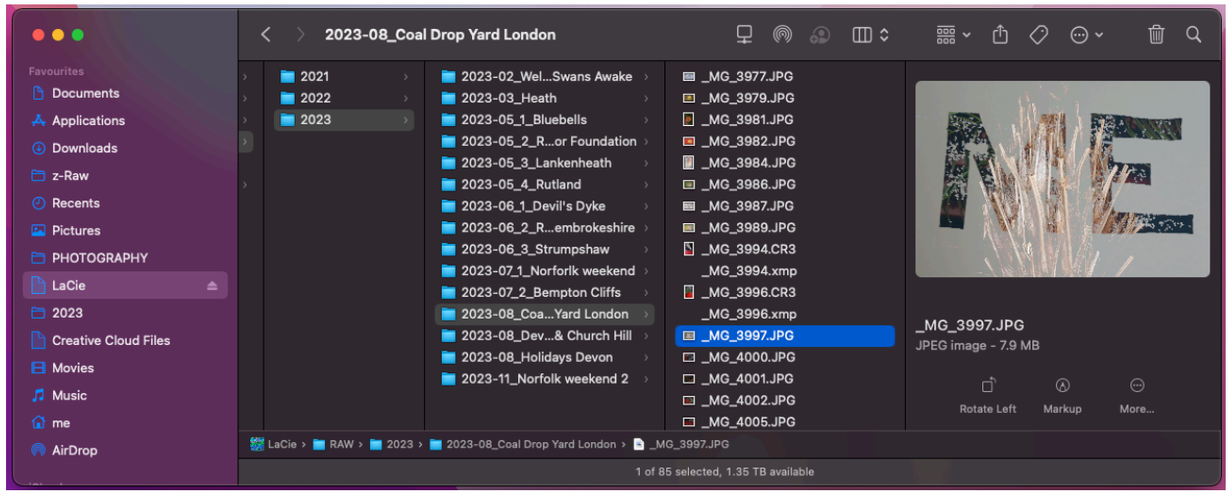
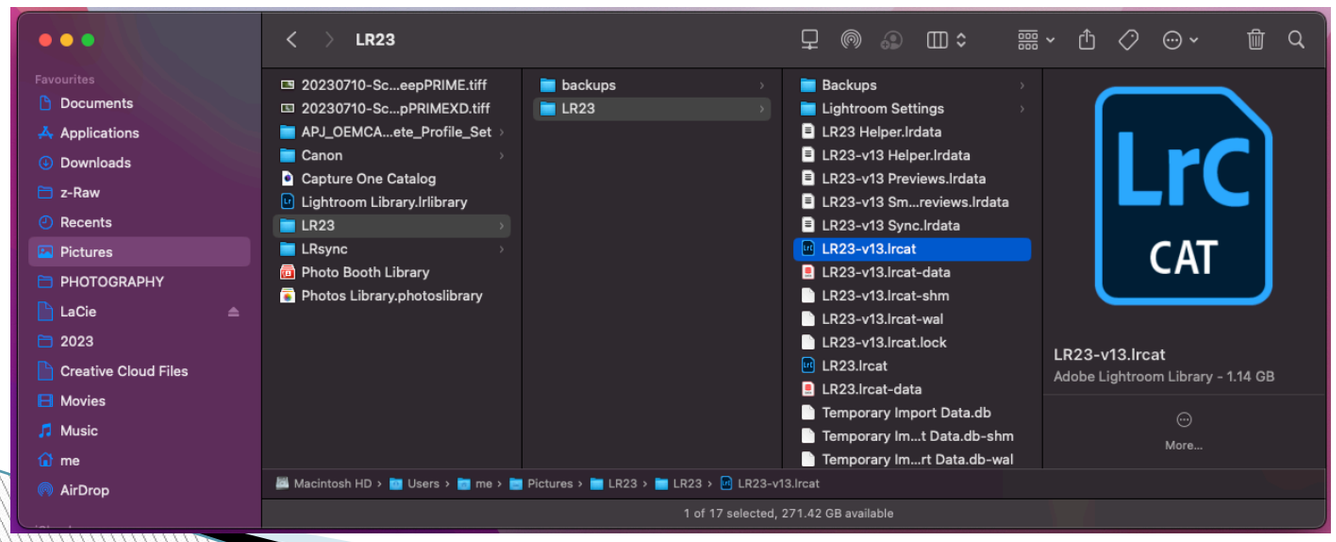


Image files and .xmp files

LrC Catalog generally stored in Pictures
(main computer hard rive)



When LrC is opened

- It accesses your images in Pictures

and

- It associates any changes to those images using the .xmp files

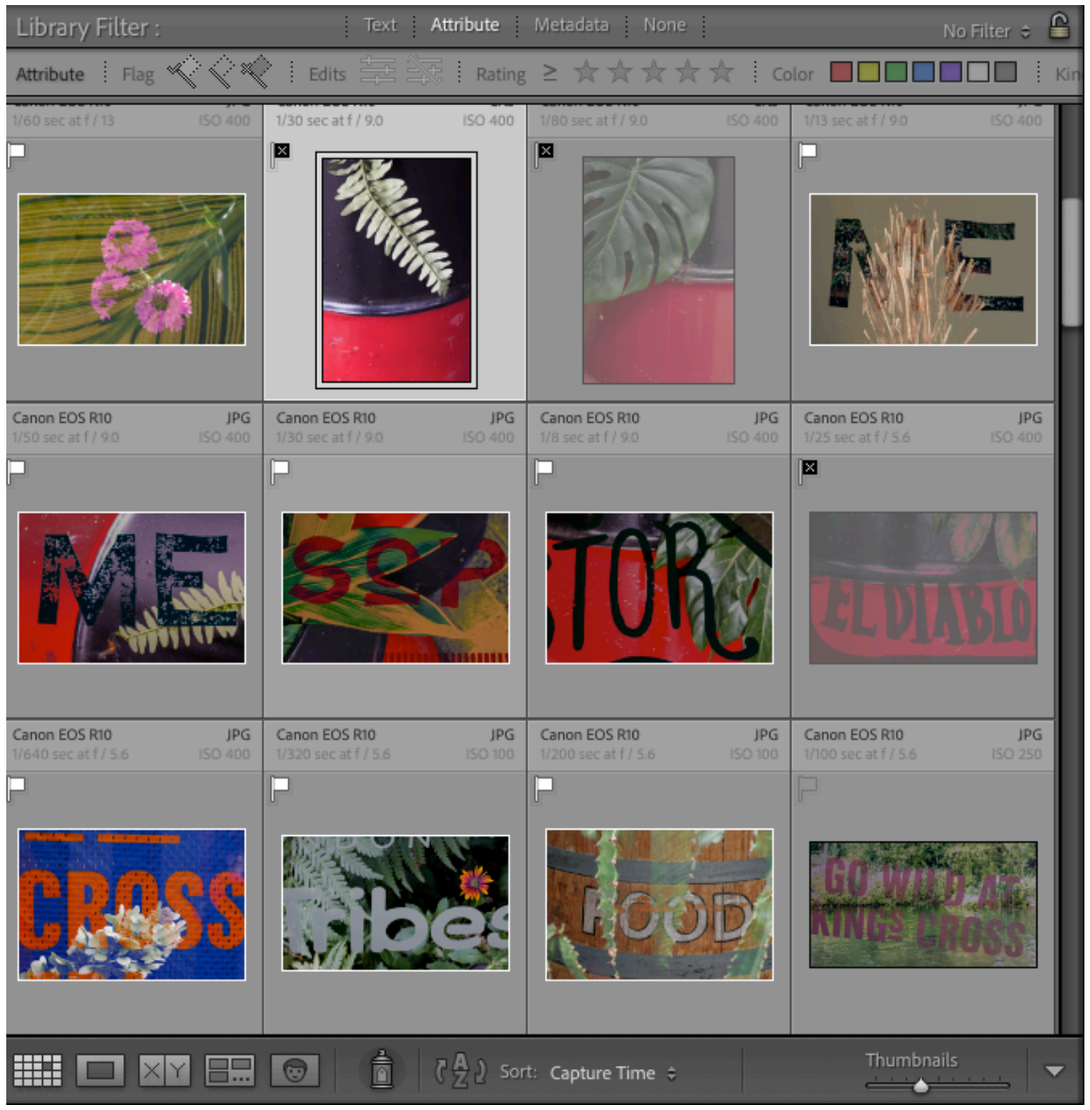
Managing images in Lightroom

- Keywords
- Flags
- Ratings
- Colour labels

- Using all/some of these will enable you to search or categorise images

Keywords way which will help you find specific images

In Library Module
Add keywords to images
Find all images with a specific keyword



Rating Photos

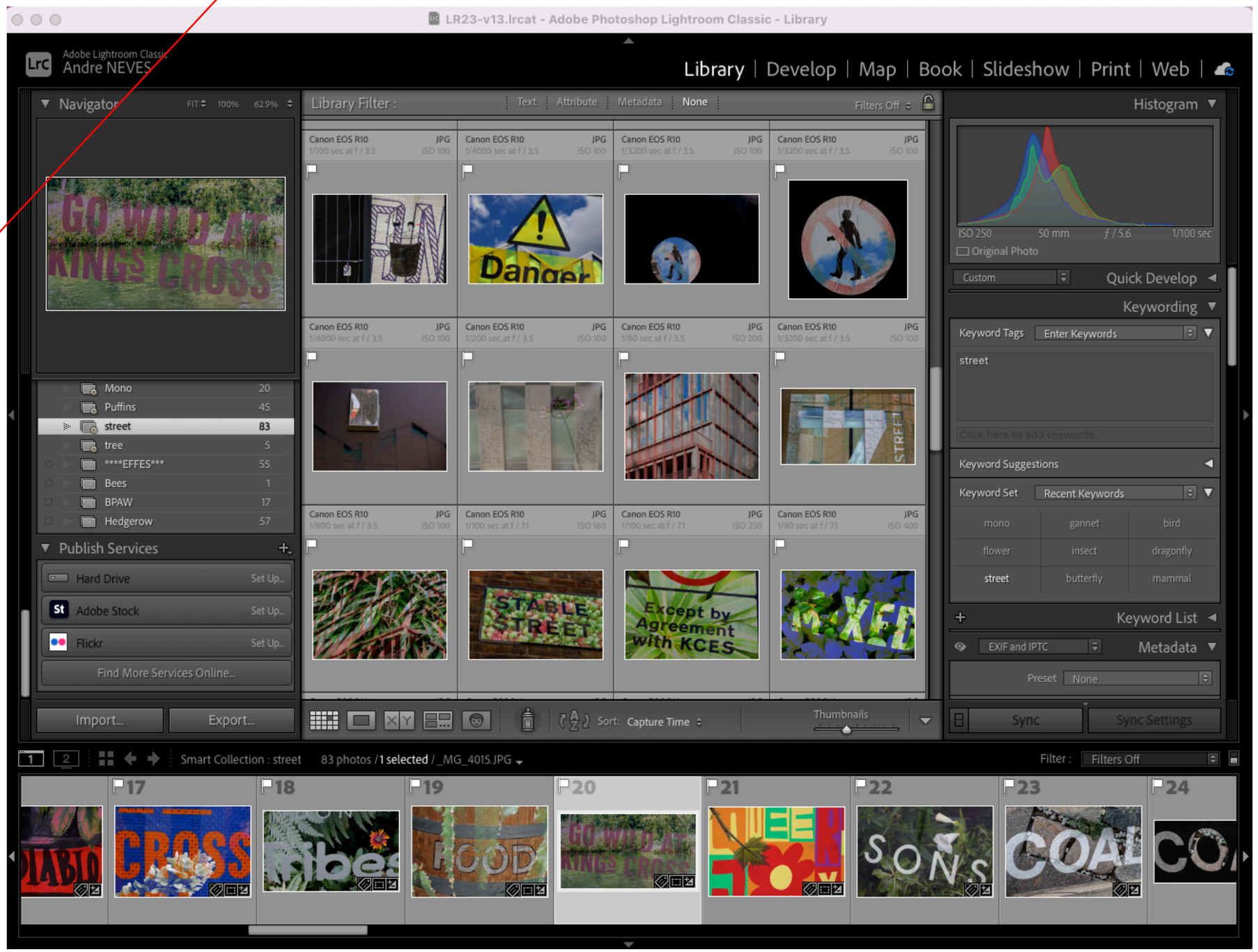
- **Flags** (P=flag; U=unflag; R=reject)
- **Ratings** (give your images “x” stars)
- **Colour** Labels
- All help you to “rank” or “sort” your images
- Use whatever system works best for you

YouTube video 1
YouTube video 2

Collections – why use them?

- Collections are designed to group photos for a specific purpose
- Unlike folders, a single photo can be in multiple different collections without taking up extra space on your hard drive
- Images in Collections are views of the image - they are not duplicate images
- Photos in Collections can come from any number of different folders on the hard drive

In Library Module, click here to Create a new Collection

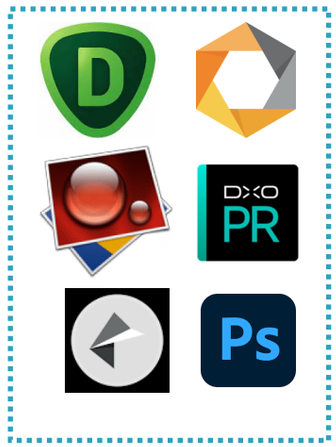


Collections vs Smart Collections

- *Collections* are created by you by dragging and dropping images from multiple folders into a single place
- *Smart Collections* are created by you but are created automatically by using the metadata
  - Ratings, labels, keywords, etc
- Collections Sets (of collections within a Collection)

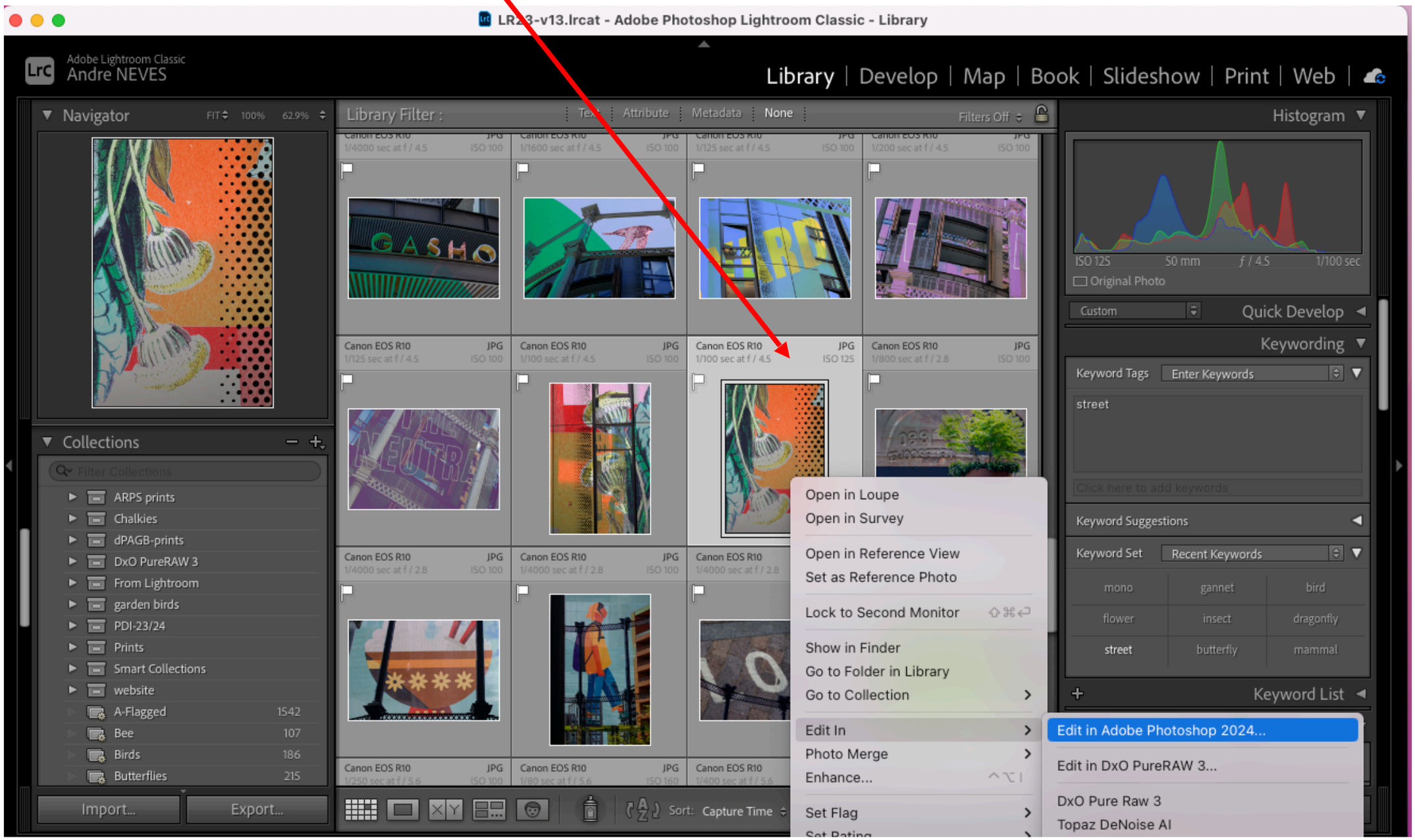
You can use collections to shortlist images for club competitions

Using External Editing software from LrC



- To avoid multiple versions of your images
  - Always enter the other software *from* LrC
- Images will export *from* LrC
- Do your editing in external software
- Close image as a “save image” in other software and image will save back into LrC
  - But more importantly be saved in your “Original Folder”

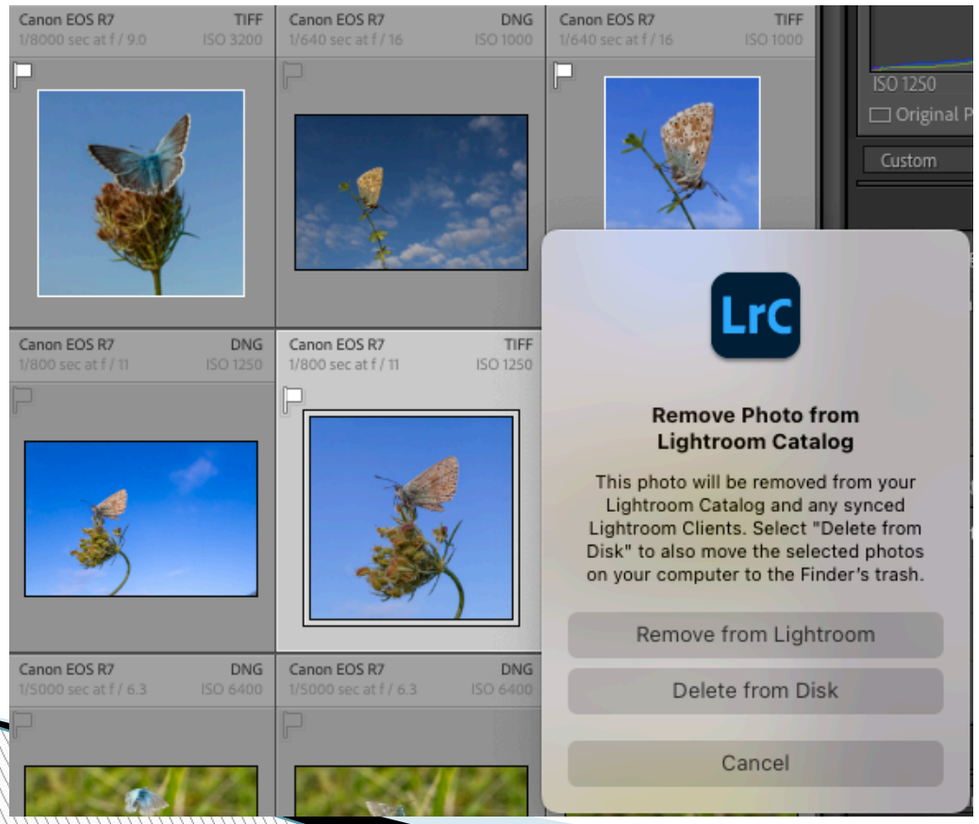
For instance, editing a photo in Photoshop.....
Right mouse click the image



Avoiding multiple versions…

- Target
  - Keep original RAW file
  - Only store your best Final edited Image in LrC
- If you have edited in external software such as PS, remove RAW (or jpg) original from LrC but keep edited file

  - Right Mouse Image —— **Remove from Lightroom** option



If you wish you can remove the original (RAW) file from LrC ; it won't be deleted from Original Folder !
only being removed from LrC)

Delete from Disk, all "non-final" versions

Keeping track of what you enter into Competitions

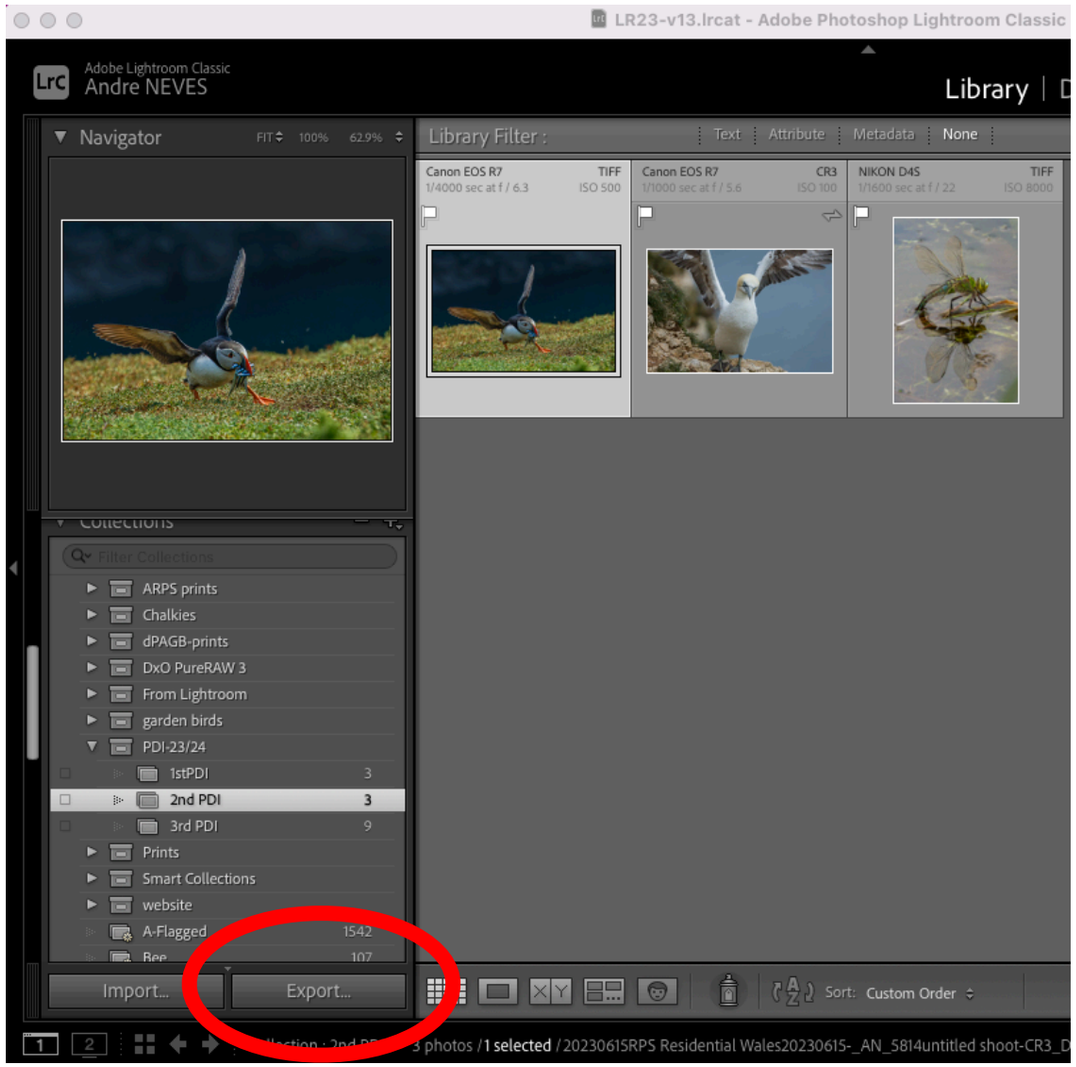
- You could create collections

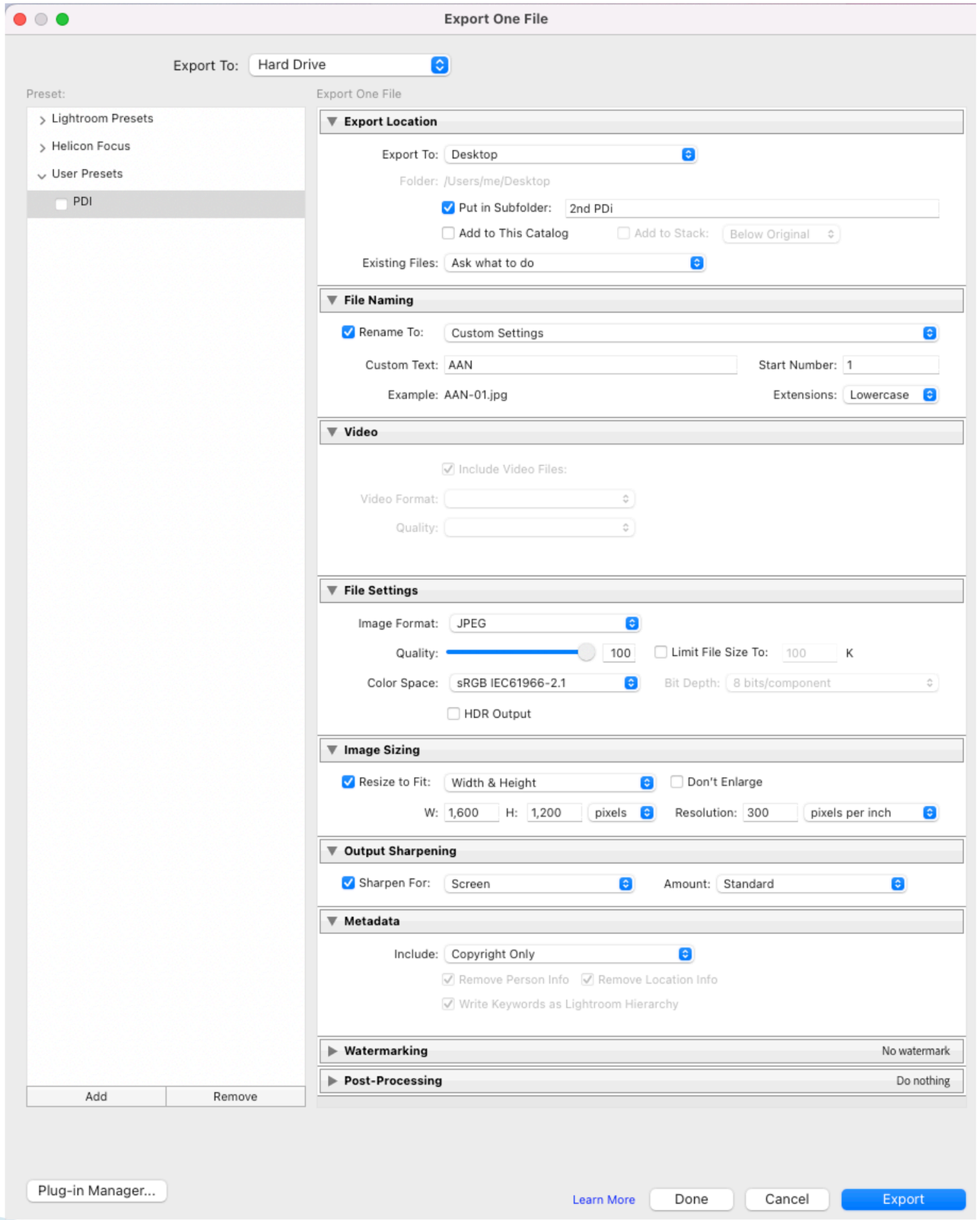
Or

- You could export Final Versions outside of LrC for storage
  - Benefit is you keep PDI resized versions away from final full version in LrC
  - You keep “bordered” print versions away from LrC

Exporting images

In Library Module





Printing

- Printing direct from LrC to a Printer
  - Straightforward
  - Use Page SetUp for paper size
  - Add Stroke if required
  - Click Rotate to Fit and then drag borders as required

LR23-v13.lrcat - Adobe Photoshop Lightroom Classic - Print

Adobe Lightroom Classic
Andre NEVES

Library | Develop | Map | Book | Slideshow | Print | Web

Preview

Template Browser

Collections

Filter Collections

- ARPS prints
- Chalkies
- dPAGB-prints
- DxO PureRAW 3
- From Lightroom
- garden birds
- PDI-23/24
- Prints
  - 1stPrint 3
  - 2ndPrint 3
  - 3rd print 3
  - prints+ 5
  - P3 1
  - P5 1
  - P8 1
  - P10 1
- hum...bird 0
- Insects 165
- kingfi...er 4
- Landsc...pe 7
- Laura 34
- Mamm...ls 35

Page Setup... Print Settings...

Unsaved Print Create Saved Print

19 x 25.333 cm

Use: Selected Photos Page 1 of 1

Page Setup

Format For: Canon PRO-300 series
Paper Size: A4 210 by 297 mm
Orientation: Portrait Landscape
Scaling: 100%

Cancel OK

Layout Style

- Single Image / Contact Sheet
- Picture Package
- Custom Package

Image Settings

- Zoom to Fill
- Rotate to Fit
- Repeat One Photo per Page
- Stroke Border
  - Width 1.0 pt

Layout

Ruler Units : Centimeters

Margins
- Left 0.64 cm
- Right 0.64 cm
- Top 0.51 cm
- Bottom 0.50 cm

Page Grid
- Rows 1
- Columns 1

Cell Spacing
- Vertical 0.00 cm
- Horizontal 0.00 cm

Cell Size
- Height 25.40 cm
- Width 19.00 cm
- Keep Square

Guides

Page

Print Job

- Print to : Printer
- Draft Mode Printing
- Print Resolution 300 ppi
- Print Sharpening : Standard
  - Media Type : Glossy
- 16 Bit Output

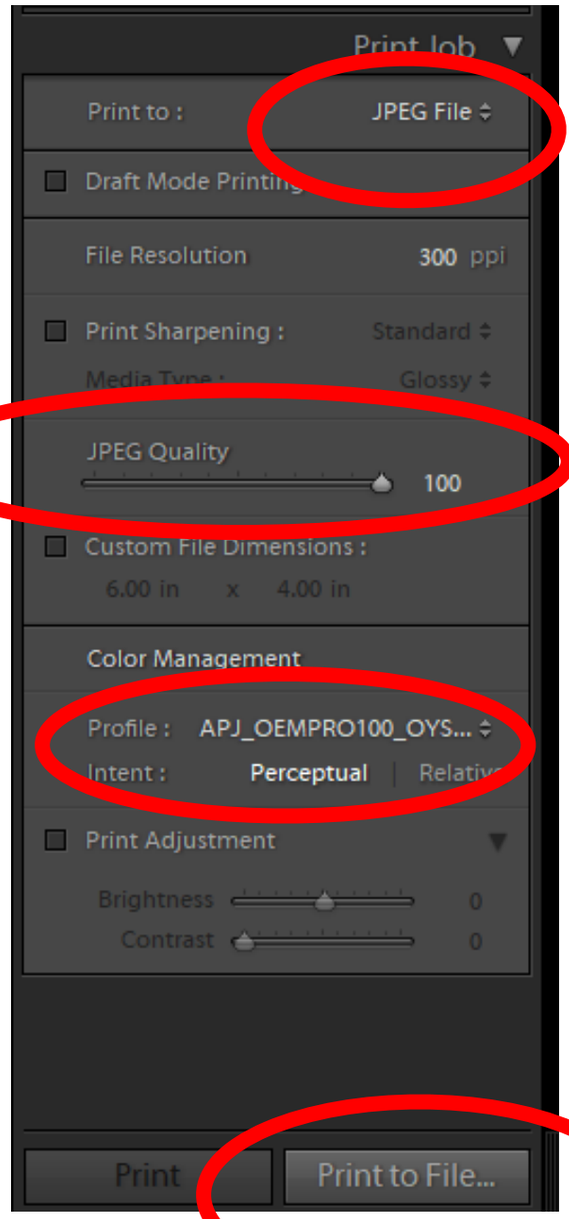
Color Management

- Profile : Pin-SemiglossBaryta_canon-Pro...
- Intent : Perceptual | Relative

Print Adjustment
- Brightness 0

Print Printer...

To create a file to send to DS Colour



- Prepare your image as previously described, then Print to “jpeg” file

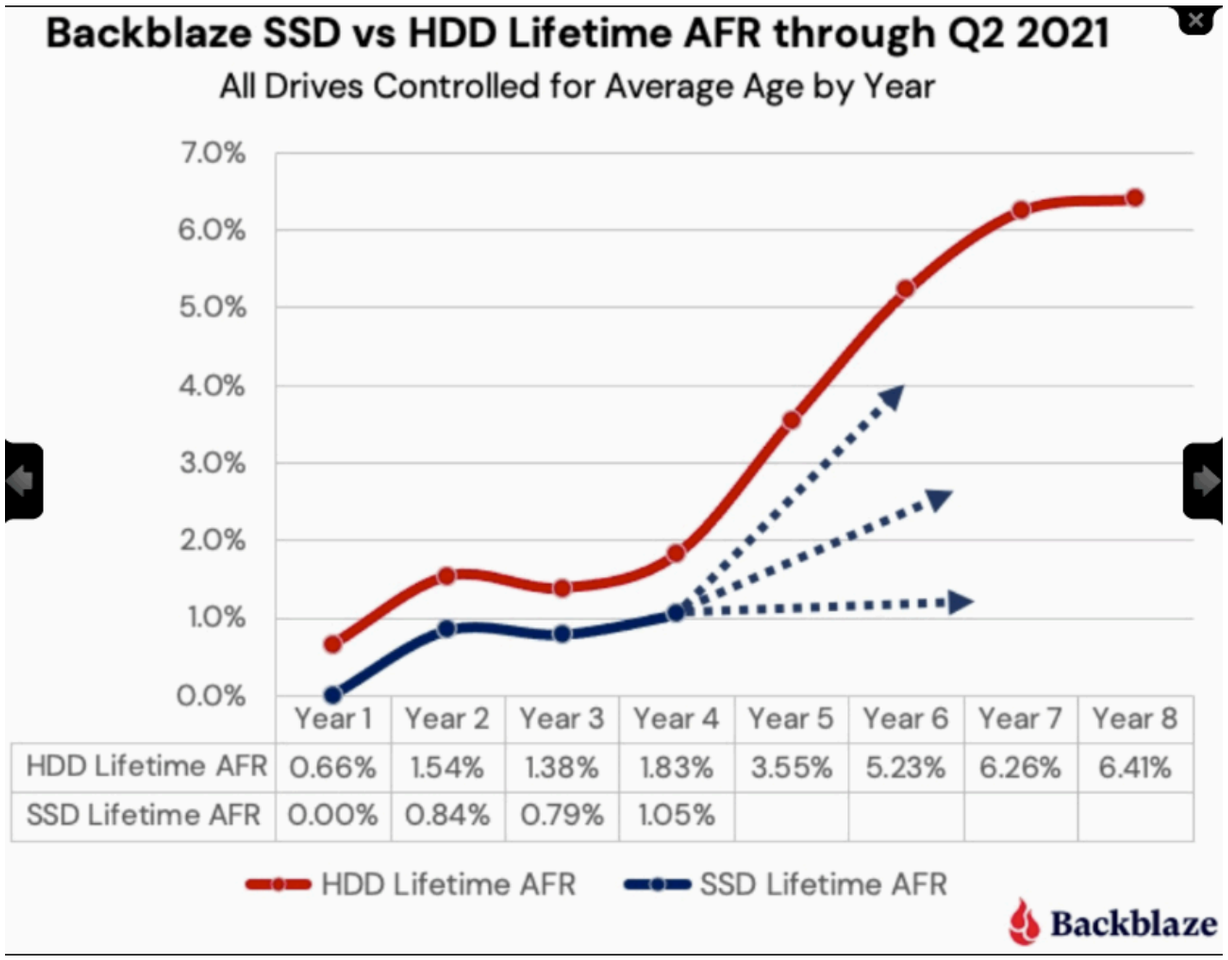
- Use the DS Labs Colour profile –need to download first

When you click this box, a dialogue box will open to define where your file is stored

Importance of Backing up your images

How many members don't have their images on multiple hard drives?

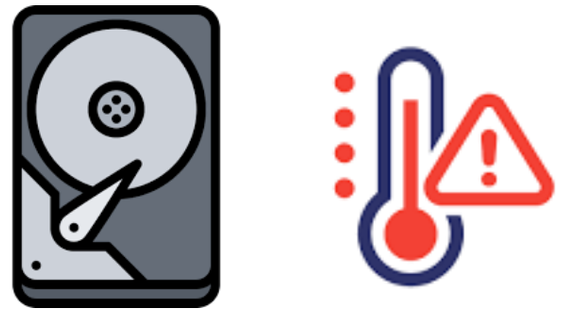
Hard Drive failures may mean you loose ALL your precious photos



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
HDD Lifetime AFR	0.66%	1.54%	1.38%	1.83%	3.55%	5.23%	6.26%	6.41%
SSD Lifetime AFR	0.00%	0.84%	0.79%	1.05%				

Source

HDD - moving parts/heating



SDD - heating

HDD : hard disk drive
SDD : solid disk drive

Hard Drives are cheap
Your images are priceless !

		HDD		SDD				
Model	Size	Write speed (MB/s)	Read speed (MB/s)	Write speed (MB/s)	Read speed (MB/s)		Price* (£)	Price/ Tb
WD 5TB My Passport Portable HDD USB 3.0	5 Tb	115.7	114.5	X	X		104	20.8
WD 6TB My Book Desktop HDD USB 3.0	6 Tb	190.6	189.5	X	X		123	20.5
SanDisk 2TB Extreme Portable SSD	2 Tb	X	X	1,000	1,050		130	65
Samsung 980 PRO M.2 NVMe SSD 2TB PCIe 4.0	2 Tb	X	X	5,000	7,000		138	69
Housing for Samsung 980 PRO	X	X	X	X	X		19	X

*at amazon.co.uk on 10 Dec ‘23

1Tb ~ 40,000 images !!!

(based on 25 MB per RAW file)

MERRY
CHRISTMAS