This is an illustration of a workflow, from capturing the image in camera then reaching a stage at the end of the workflow where the edited image can be printed, or as a file suitable for projecting/displaying on a website or computer screen or as an image suitable for including in a book of photographs.

The author shoots in the Raw file format.

CAPTURE THE IMAGE

The following items are usually considered when taking pictures:

- Composition
- Lighting
- Exposure
- Focus
- Colour Space in Camera – this is only important if shooting JPEG images, raw files do not contain any resolution or colour space information, this is added when an image goes through Adobe Camera Raw or when the picture is exported from Lightroom.

IMPORT THE IMAGE (see page 3 and 5 for specific details)

Connect a memory card to the computer or connect the camera, by a suitable data cable, to a computer.

Adopt a folder naming convention, the author uses a reverse date and a title indicating what the folder contains e.g. 210506 Godrevy Cornwall. Using the reverse date puts all of the folders in ascending or descending order, when viewed in a Finder window.

Before deleting the pictures from the memory card, the pictures are backed up immediately to a second external drive.

ORGANISE

Decide where the images are to be stored. Select images to edit, if necessary apply star ratings in Adobe Bridge by pressing the Command key plus a numeric key between 1 and 5 or Lightroom by pressing a numeric key between 1 and 5. In Lightroom it is also possible to apply a colour labels to the images from a choice of five colours.

COLOUR WORKING SPACE SETTINGS IN CAMERA, PHOTOSHOP, LIGHTROOM and CAMERA RAW

Choosing Camera Colour Space

Colour spaces are an interesting and important part of digital photography. They help your images fit into a much broader range of imaging devices. Software, printers, monitors, and other devices recognize which colour space is attached to your image and use it, along with other colour profiles, to help balance the image to the correct output colours for the device in use.

It is only important to set the colour space in the camera if images are being shot in JPEG format. The two Colour spaces available on Nikon cameras have different gamut's, or ranges of colour. They are called sRGB and Adobe RGB. You'll find the colour space choices on the shooting Menu, as shown in the diagram below.
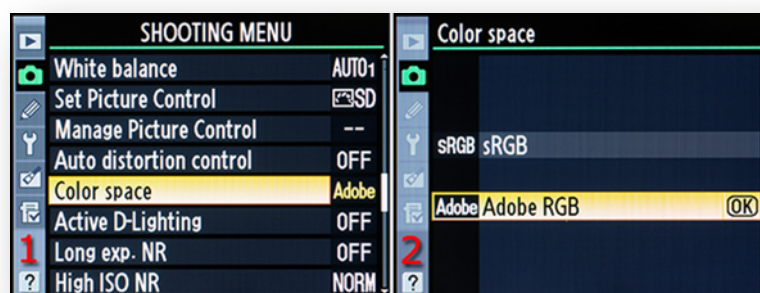
Adobe RGB uses colours from a broader selection of the total colour range, so it has a wider gamut. If you are shooting JPEG images, that might be printed, Adobe RGB is often the best colour space to use.

Setting Photoshop Colour Preferences

To obtain the largest range of colours it is best to use the ProPhoto RGB colour space. This is set in Photoshop CC by Edit → Color Settings (Shift+Command+K). Note the ticks against "Profile Mismatches" these settings warn the author when there is a profile mismatch when images are brought into Photoshop.
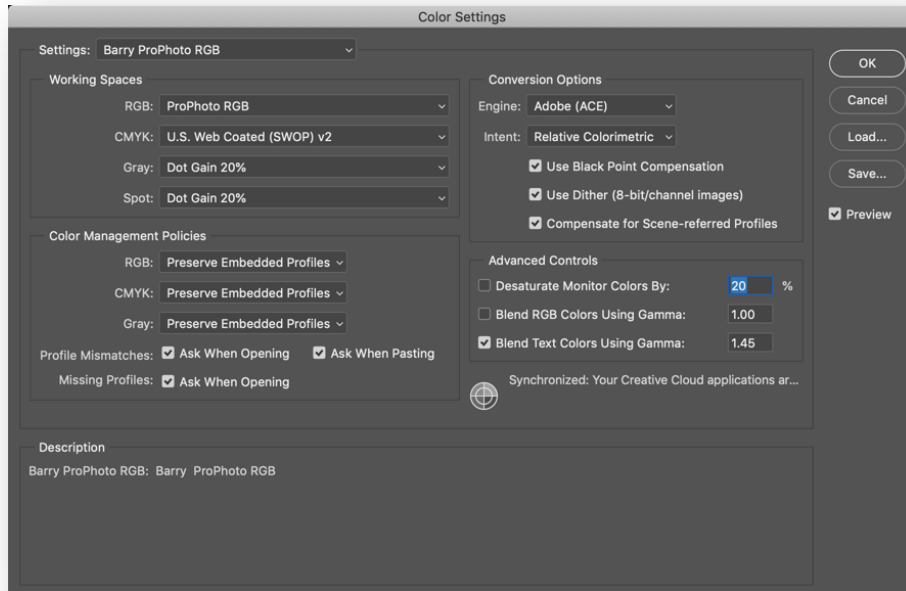

LIGHTROOM Preferences in Catalog Settings

Make sure that both these settings are ticked "**Include Develop settings in metadata inside JPEG, TIFF, PNG and PSD files**", although it does not say, these changes will be also be saved to DNG files and "**Automatically write changes into XMP**". This will ensure all of the edits are written back to the original file. So if the Catalog becomes corrupt or lost then it will be possible to import the images back into a new Catalog and all of the previous edits will appear. Any edits that are made using these settings will also be visible in Adobe Bridge.
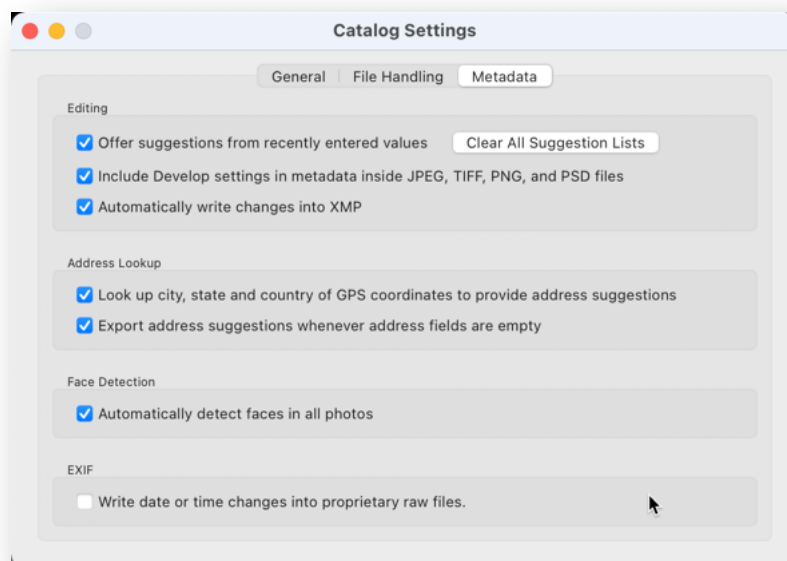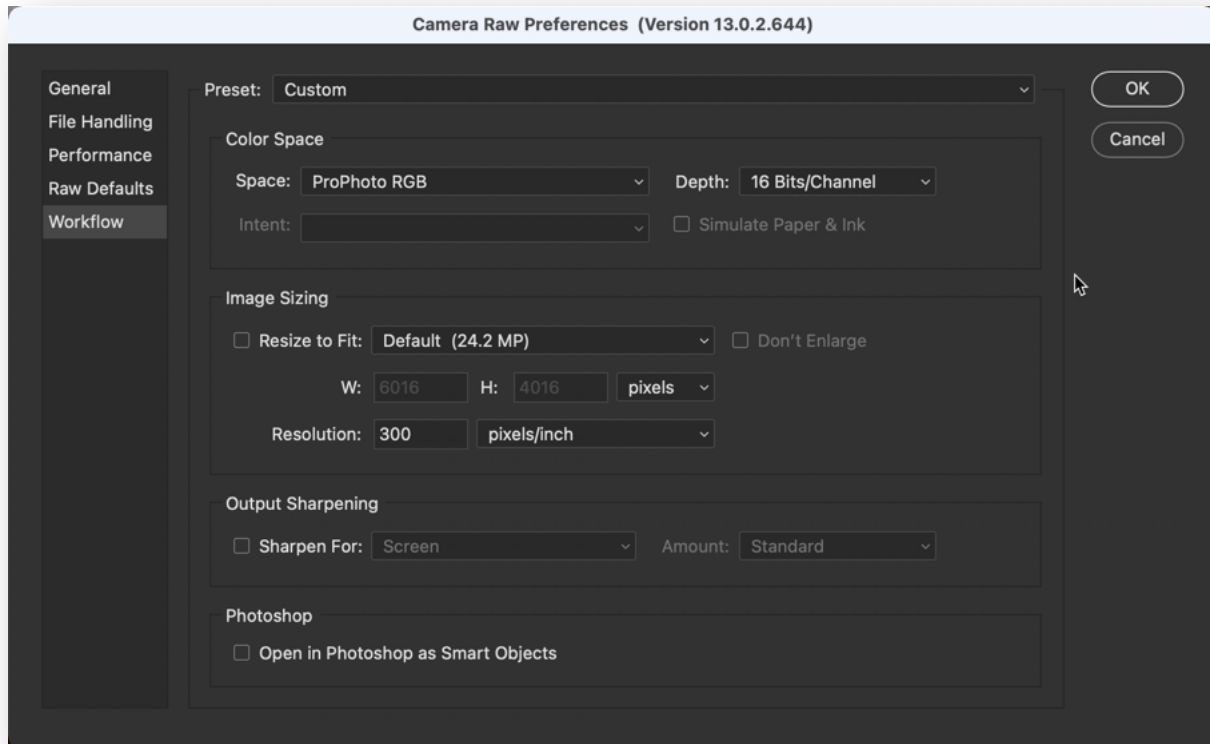
SETTING CAMERA RAW Preferences

At the base of the camera raw dialogue box can be seen this setting box:
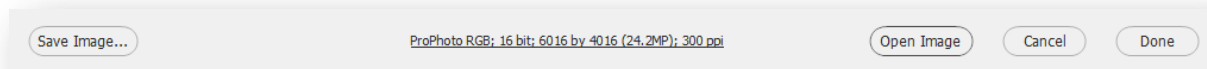
Click on "ProPhoto RGB; 16 bit; 6016 by 4016 (24.2MP); 300 ppi" the dialogue shown below will appear:

The author uses the ProPhoto RGB; 16bit; 6016 by 4016 (24.2MP); 300ppi. Note the image dimensions will be relative to the users camera sensor size.

DEVELOP – Non-Destructively

Adobe Bridge → Camera Raw → Remove Chromatic Aberrations and Lens Distortions

Computer → Lightroom → Remove Chromatic Aberrations and Lens Distortions, the latter is set as an import pre-set.

(These changes are stored within a text file with file extension .XMP)

IMPORT

Method 1

A dedicated card reader is used to import the images from the memory card to the desktop computer, alternatively the camera can be attached to the computer with a suitable cable.

- Create a folder on the drive where the images are to be stored e.g. "211117 Kedleston Hall Derbyshire". Open the folder containing the images on the camera memory card, select all of them (or Command + A), in the menu Bar go to Edit → Copy (or Command + C), open the destination folder where the images will be stored, then go to Edit → Copy (or Command +V).
- Before importing them into Lightroom Classic an import pre-set needs to be set up.

Add metadata on import

- Before metadata can be added to the images, create a metadata pre-set with all the details that are needed to apply to the images – this saves having to type it afresh for each image. To create a pre-set in Lightroom Classic, choose File → Import Photos and Videos, then open the Apply During Import panel at the right hand side. From the Metadata drop down list choose New and type a name for your pre-set.

Completing the fields

- Many of the fields in the panel are fields which relate to an individual image such as Label, Caption and Subject information. Don't complete these fields in your pre-set – they'll need to be added on an image by image basis as each image is usually different. The fields to complete are in the IPTC Copyright and IPTC Creator Information sections.
- Typically in the IPTC Copyright field type the copyright text – e.g. © 2020, Joe Bloggs, All Rights Reserved. To get the copyright symbol hold Option + G on a Mac, Alt on the Windows keyboard and type out 0169 on the numeric keypad.
- In the Copyright Status box choose Copyrighted.
- In the Rights Usage Terms field this explain how the image can be used – for example type "No reproduction without prior permission".
- Copyright Info URL, is a field which is not recognized by a lot of other programs – best left blank.
- The IPTC Creator section is where personal details are added, including name, address, email address, website and so on. With multiple email addresses or websites – separate them with commas.

Blank template   Completed template

When the fields have been completed, click create.

Apply the metadata pre-set to images as they are imported by making sure that the pre-set is selected in the Metadata box in the Apply During Import panel.
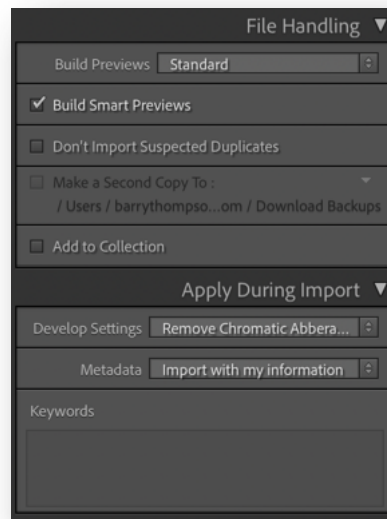
Thereafter when images are imported into Lightroom Classic, the information in the template will be added to the images.

Method 2

A dedicated card reader is used to import the images from the memory card to the desktop computer, using the Adobe Bridge CC Photo Downloader, in Bridge go to Files → Get Photos from Camera. Click on Advanced Dialog
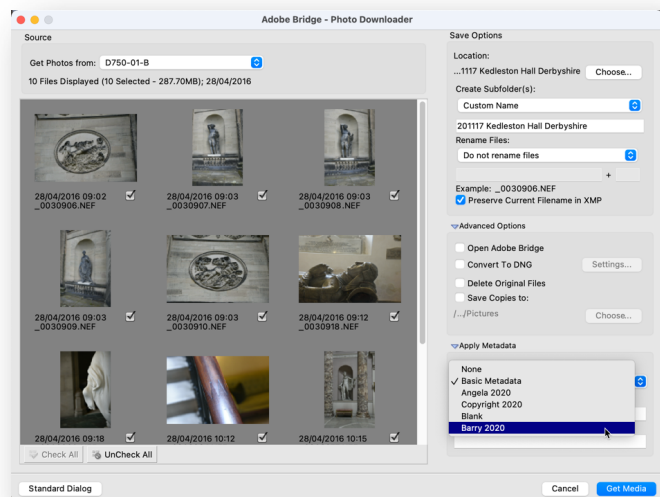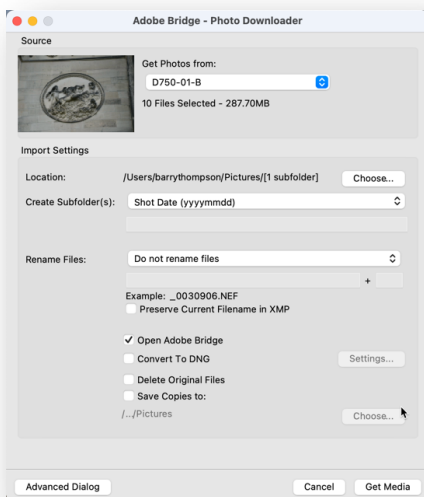

This dialogue box has been setup to save the images in this location: Lacie (external disc) → Pictures 1997-2021 → Year-2021. Note the Folder name that has been typed in the field where a custom folder can be added, in this case "211117 Kedleston Hall Derbyshire". The author also selects "Preserve Current File Name in XMP" and also has a metadata template created in Bridge to apply additional EXIF data (see next paragraph on how this is created.

After clicking the "Get Media" button at the foot of the dialogue box, the images will be copied to the pre-set location. At the same time an XMP file is created for each image from a template set up in Adobe Bridge. This contains the authors copyright and contact details as well as the EXIF data created by the camera during the taking stage.

Before deleting the images from the memory card, the folder of imported images is backed up to a second external backup drive.

Metadata Template Created in Adobe Bridge (Tools → Metadata Template)

Some items have been purposefully left out for privacy reasons
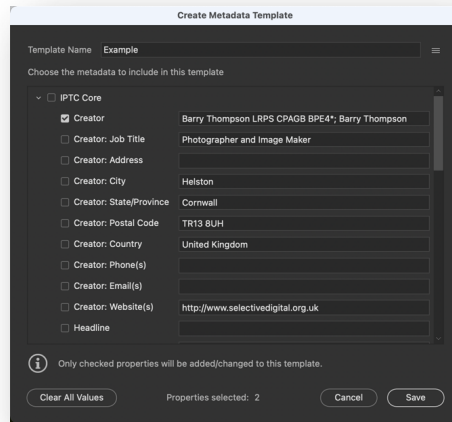
ORGANISE

This involves setting up a folder/directory structure on the storage device. This is a screenshot of part of the 2020 folder where images are stored, and a screenshot of the folder structure within the main folder structure from an overseas visit.
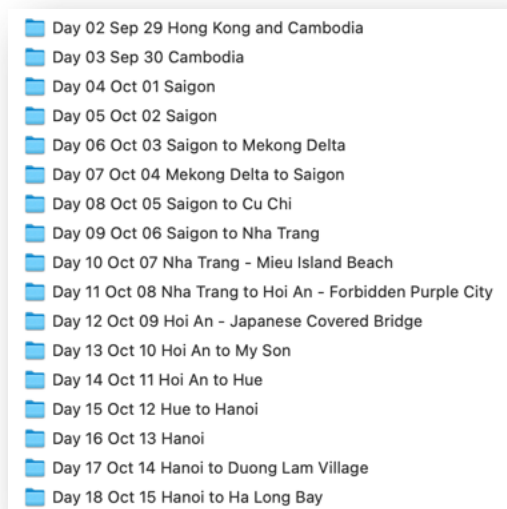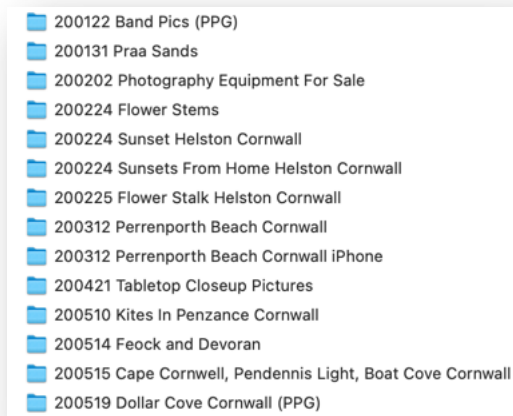
Star Ratings

These can be used both in Adobe Bridge and Lightroom to allocate a rating depending on the use to which the images will be put. For example a one star rating could be used for images that will be used on a website, whereas a four star rated image might be printed either as a competition/exhibition image, or for a photo book.

When these images are exported from Lightroom images for web are allocated sRGB colour space, 72 pixels per inch and image size depending on the competition/exhibition.

Images for printing will be edited on Photoshop with ProPhoto colour space, 300 pixels per inch, 16 bit colour at a size appropriate for the print. These edited images will be stored in a sub-folder with a name "Processed".

Editing in Lightroom

After importing the images into the Lightroom Catalog selections are made using the aforementioned star ratings, if the star ratings have be applied in Adobe Bridge, these will be carried forward into Lightroom.

The editing in Lightroom will involve correcting verticals and horizontals, exposure, noise reduction and cropping. All of these are non-destructive editing techniques. If further work on the image is needed then the image will be loaded into any one of a number of plug-ins from Luminar, Topaz Labs or Nik or loaded directly into Photoshop where further editing tools, not available in Lightroom, can be used.

STORAGE DEVICES

The custom built iMac computer has the following devices:

1TB SSD internal storage, no data is stored on this disc.

6TB external storage permanently connected, all of the images and data are stored on this disc.

2, 2TB and 1, 6TB external backup drives.

USEFUL SOFTWARE

Adobe Bridge CC, is part of the Adobe suite of CC programmes.

Adobe Photoshop CC and Adobe Photoshop Lightroom CC. Subscription £9.98 /month, website: https://creative.adobe.com/plans

DxO Nik Collection Plug-ins (paid for) website: https://nikcollection.dxo.com

Topaz Plug-ins (paid for) website: http://www.topazlabs.com/

GoodSync backup software, (paid for) website: https://www.goodsync.com/

The Turning Gate Lightroom Plug-ins (paid for) website gallery creation: http://theturninggate.net/