

# Intro to Photoshop Elements 14: Week One

Instructor: Roger Buchanan

Notes available at [www.thenerdworks.com](http://www.thenerdworks.com)

**Course Outline:** At an **introductory level and pace** this course will cover the **main concepts** involved in getting your photos on a computer, organizing them, editing them & showing them off in various ways!

**Class Survey:** Requests/Suggestions/Comments???

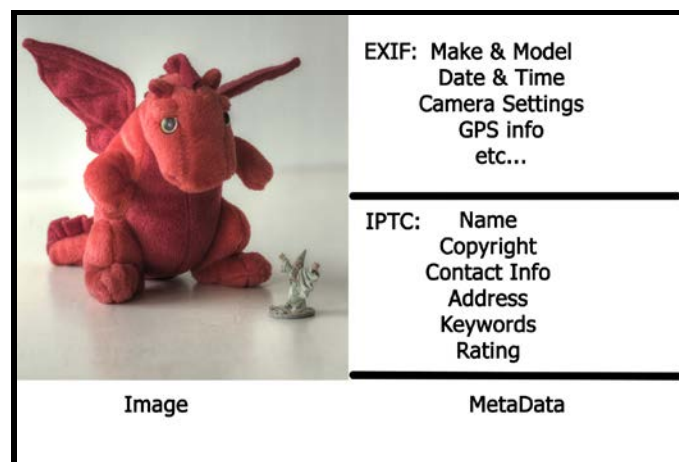
**Week ONE:** Import, Organize & Search through your photos, **Back-Up Photos;**

**Equipment needed for Photoshop Elements:** Photoshop Elements needs a 2GHz CPU, at least 4GB of RAM (more RAM is always better), Internet & lots of hard drive space for storage.

**Monitor Calibration:** A DEMO of keeping your display colours consistent with a colorimeter. Roger is using the DataColor Spyder4Pro Colorimeter & software. (About \$149.00)

**Colour Management:** Set your colour options for where most of your photos will end up, on a computer screen or to a printer? Access the settings via "Edit>Colour Settings..." (**Ctrl+Alt+G**)

**Digital Photo = Image + MetaData (EXIF & IPTC):**



**Activity:** Following the instructions, fill out the Keywording Worksheet on **Page 4**

**Cataloging vs Browsing:**

Using Folders and My Computer to manage your files is called "Browsing". You need to click your way to find your pictures.

Photoshop Elements Organizer tracks the location of your photo by assigning each photo a "thumbnail".

Move Files **with the Organizer ONLY**. Once you use the Organizer do not move photos any other way! To move a photo with the Organizer use the menu command "File>Move" (**Ctrl+Shift+V**).

**Photoshop Elements Preference Settings:** Set up Elements via "Edit>Preferences>General" (**Ctrl+K**)

# What Makes a Digital Photograph

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**Image**

**EXIF: Make & Model  
Date & Time  
Camera Settings  
GPS info  
etc...**

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**IPTC: Name  
Copyright  
Contact Info  
Address  
Keywords  
Rating**

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**MetaData**

## Elements 14 Organizer - Interface Outline: (See the Organizer Screen outline on page 3)

The numbered bullet points below correspond to the numbered callouts on the screenshot of the Organizer Screen.

1. **Import via:** Card, Folders, Search... This is where you start to bring photos onto your computer;
2. **Albums, Mobile Albums** (Revel with Adobe ID account) & **Folders** . These represent the locations where you various photos are currently stored.
3. **Thumbnails** of photos in your catalog. These are just small thumbnails representing your photos, they are not your full size photographs. Think of them like the catalog cards in a library...
4. Marking photographs as **People, Places & Events**, also making a **Slideshow**, starting the **Editor**. This is where you can start marking your photos based on their content, and also how you start the Editor.
5. **Timeline** showing months of the years with photographs in catalog. This allows you to search and display all the photos of any given month of any year.
6. Media can be sorted based on selecting **People, Places & Events**. This method displays your photos based on the content of the photo...People-Who? Places-Where? Events-What?
7. **Create & Share** functions for working with photos or sharing photos.
8. **Rating with Stars & Tagging** (using Keywording) & **Captioning** photographs
9. **Thumbnail sizing, Instant Fix & Display Tags/Info Panel**. Adjust the size of your thumbnails, do some quick adjustments via “Instant Fix”, and call up the “Tags/Info Panel”.

Search, Sort & Find. You can create “Saved Searches” and use the various “Find” commands in the Find menu to access hard to locate photographs. I use “**Find> by Details (Metadata)**”. It’s extremely useful!

**Back-up:** (see Corrupted Photo Hand-Out) – Why you need to backup both your catalog and your photographs to keep them safe. You can do that via File Menu command File>Backup Catalog (**Ctrl+B**)

New in Photoshop Elements 14:

Remove camera shake — great for selfies and other handheld shots	NEW
Remove haze for sharp-looking landscape shots	NEW
Elements analyzes your photo and gives you five effects that fit perfectly	NEW
Use 34 Guided Edits, & new ones for motion to action shots or to resize to fit a frame	NEW
Easily select detailed edges like hair or fur	NEW
Find photos by the people in them	ENHANCED
Find photos and videos on a map based on where you took them	ENHANCED

## Keywording Worksheet:

Instructions: In the space provided, for each of the images below, write down as many reference keywords as you can come up with. Use single words like "Bird" or "Water" & not phrases like "Scenic Lake" or "Hot Air Balloon Ride"



Image 1  
(Mr. Peanut Hot Air Balloon)



Image 2  
(Chickadee flying off wrist)



Image 3



Image 4



Image 5



Image 6



# Elements 14 Organizer Screen

The screenshot displays the Adobe Photoshop Elements 14 Organizer interface. At the top, the menu bar includes File, Edit, Find, View, and Help. A search bar is located on the right. The main navigation bar features tabs for Import (1), eLive (2), Media, People (6), Places, Events, Create (7), and Share. Below this, the interface is divided into a left sidebar for 'My Folders' (containing a list of folders from 07 to 2009 08 07), a central grid of image thumbnails, and a right sidebar for 'Tags' and 'Information'. The central grid shows a timeline at the top (5) and a grid of image thumbnails with their respective metadata, including star ratings, dates, and file names. The right sidebar shows the 'General' information for the selected image, including its name, notes, ratings, size, date, and location. The bottom toolbar contains various actions like Hide Panel, Undo, Rotate (4), Add Location, Add Event, Slideshow, Editor, Zoom, Instant Fix (9), and Keyword/Info. The status bar at the bottom indicates '1 Item selected' and the date range 'Jan 1980 - Feb 2016'.

# Intro to Photoshop Elements 14: Week Two

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**Week TWO:** Process, Clean-up, Adjust & Enhance your photos

**Editing Concepts:** (These are the basic **fundamental concepts**, as everything can't be covered in one class)

**File Formats:** jpeg vs RAW processing. A jpeg is an image that has already been processed in the camera, according to the camera jpeg settings. Always convert a jpeg into a tiff or a psd file before editing so you avoid compression artifacts or colour banding (which result from jpeg compression algorithms). RAW files always need to be processed as they are not adjusted in the camera. RAW files are just RAW data.

**Bit Depth:** 8bit vs 16bit. Bit depth determines the number of tones that you can use in your image. The greater the bit-depth the greater the range of tones can be kept in the image. Jpeg=8-bit. RAW=12-bit. **(See Demo Hand-out)**

**Global vs Local Edits:** Global edits (i.e. exposure adjustment) affect the entire image, and are done first, Local edits are actions that only affect a specific area of the image (i.e. spot removal) and are done last.

**Layers:** allow you to maintain your editing adjustments separately from the image and each other. **(See Demo)**

**Masks:** applied to Layers then allow you to control where your adjustments affect your image.

**Opacity:** allows you to control the strength by which the adjustment layer gets applied globally

**Selections with Feathered Edges:** allow you to control which parts of the images are being chosen for adjustment.

**Workflow:** The order of steps by which you process one or multiple images.

1. For a RAW image bit-depth is set to 16-bit initially via Camera RAW;
2. **Physical Edits:** Level the horizon if needed, Crop the Image if required;
3. **Global Edits:** White Balance, Exposure, Noise, Capture Sharpening (100% view), Contrast;
4. If needed drop Bit Depth;
5. **Local Edits:** Selective Colour & Exposure adjustments, Spot Removal, Cloning, Creative Sharpening;
6. Resize as needed;
7. Apply any chosen special effects.
8. Output Sharpening done at 100% image view size;

**Sharpening:** It needs to happen in varying amount at 3 different points in the processing workflow:

1. **Capture sharpening** happens at the end of RAW processing (jpegs are already capture sharpened);
2. **Creative sharpening** is applied as needed throughout the image after Global & Local edits are done;
3. **Output sharpening** is applied just before creating a print or uploading a file for a website.

**TABLE 1:** Recommended sharpening settings for various photo subjects. (View at 100% when Sharpening a Photo)

Photo Subject	Amount %	Radius pixels	Detail
Average	125	1	Hold Alt key down and Adjust Detail to your Taste View Image at 100% while adjusting
People up close	75	2	
Medium Scenic	225	0.5	
Edges, lots of edges	65	4	
General Purpose	85	1	

## **The Editor Screen Outlined: (See page 3)**

- 1.Editing Modes: Quick, Guided & Expert
- 2.Tools Palette
- 3.Tools Options
4. Image editing preview
5. Adjustments Panel for viewing Layers, Histograms, etc.
6. Taskbar for commonly used actions.
7. To view Layers, Effects, Graphics, Favorites & More.

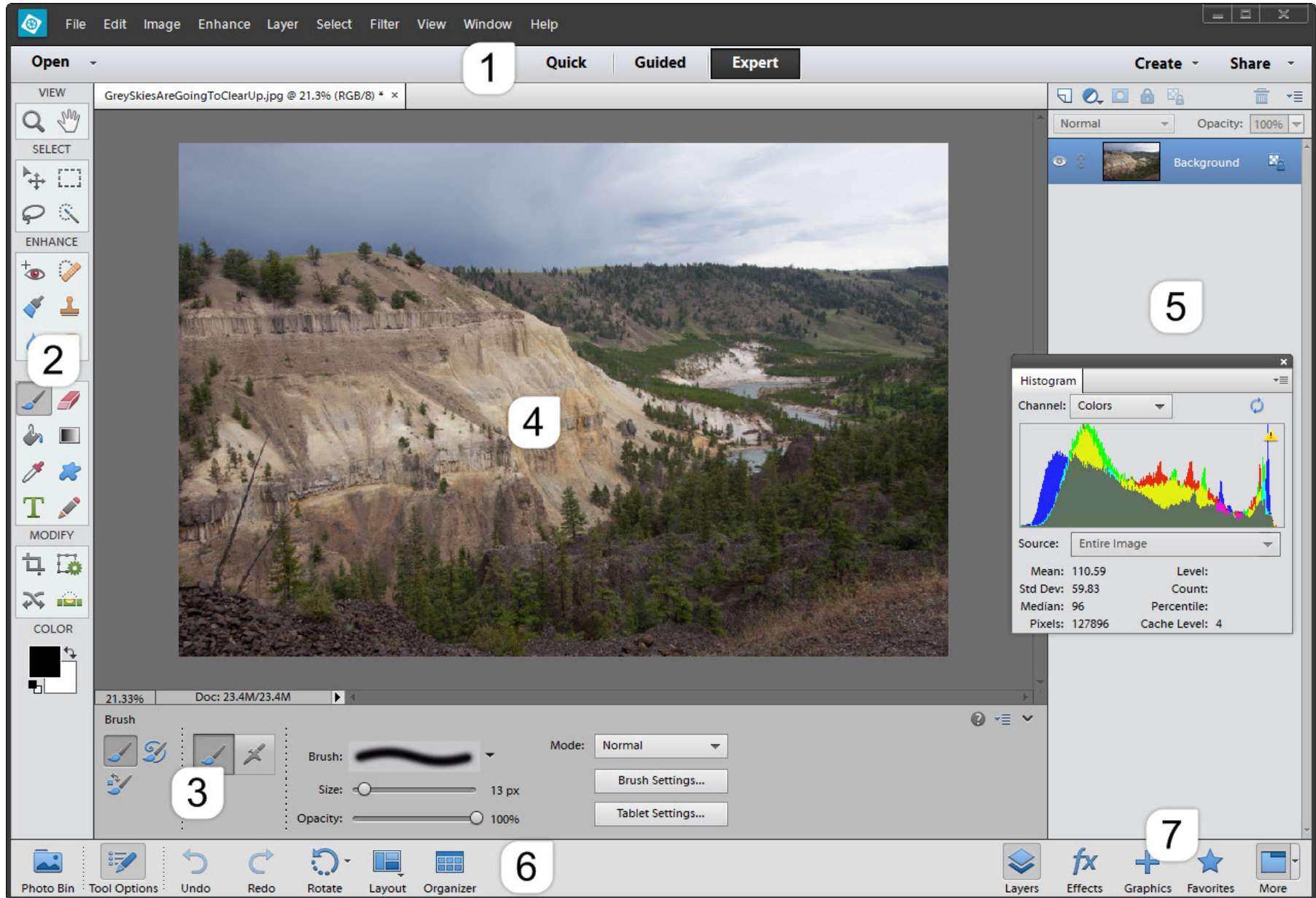
## **Adobe Camera RAW Screen Outlined: (See page 4)**

1. Toolbar
2. Preview Checkbox
3. Working Image
4. Bit-depth selection
5. Histogram with Clipping warnings and Photo Info
6. White Balance slider
7. Exposure Sliders (Hold the Alt key down and click on the slider)
8. Image Open or Done Buttons

## **Features of this new Photoshop Elements 14 version:**

- ✓ Remove camera shake — great for selfies and other handheld shots **NEW**
- ✓ Remove haze for sharp-looking landscape shots **NEW**
- ✓ Elements analyzes your photo and gives you five effects that fit perfectly **NEW**
- ✓ Use 34 Guided Edits, & new ones for motion to action shots or to resize to fit a frame **NEW**
- ✓ Easily select detailed edges like hair or fur **NEW**
- ✓ Find photos by the people in them **ENHANCED**
- ✓ Find photos and videos on a map based on where you took them **ENHANCED**

# Elements 14 Editor Screen (eLive is added in Version 14)





# Adobe Camera RAW

Camera Raw 8.3 - Canon EOS 40D

1

2

3

4

5

6

7

8

Preview

R: ---  
G: ---  
B: ---

f/4.5 1/500 s  
ISO 200 28-135@28 mm

Basic

White Balance: As Shot

Temperature 5050

Tint -5

Auto Defa

Exposure 0.00

Contrast 0

Highlights 0

Shadows 0

Whites 0

Blacks 0

Clarity 0

Vibrance 0

Saturation 0

14.9%

Yellowstone\_GRB\_16 08 09\_0571.CR2

Depth: 16 Bits/Channel

Help Save Image... Done Cancel Open Image

# Camera Raw Controls explained

**Basic Panel:** White Balance, Tone & Saturation controls.

Start at the top of the basic panel, with White Balance, and then work your way down, then revise.









Temp	Sets the balance between Blue and Red (i.e. Cool vs Warm image)
Tint	Sets the balance between Green and Magenta
Exposure	Sets overall brightness, while protecting Whites and Blacks
Contrast	Sets the overall balance between lighter and darker tones (adjusting contrast boosts saturation!)
Highlights	Refines the values for the “just below white” tones
Shadows	Refines the values for the “just above black” tones
Whites	Fine tune the determination of what is considered white
Blacks	Fine tune the determination of what is considered black
Clarity	Method to adjust mid-tone contrast, adds “Punch”
Vibrance	Adjusts saturation of least saturated mid-tones while protecting skin tones
Saturation	Adds saturation evenly across the board, use “Vibrance” instead

**Detail Panel:** Sharpening and Noise reduction controls.

Remove Noise **BEFORE** you do your Sharpening!

<b>NOTE:</b>	Sharpening should always be done at a viewing rate of 100% (see Table 1 on Page 1)
Amount	Controls the strength of the sharpening
Radius	Defines how far on each side of an edge the sharpening is applied
Detail	Lower suppresses Halos, Higher uses a deblur control
Masking	Used to restrict the sharpening to only the edge areas
<b>Note:</b>	Noise comes in TWO varieties: <b>Luminance Noise</b> appears as speckles in brighter areas, like skies and skin tones. <b>Colour Noise</b> appears mostly as coloured blotches in darker areas like shadows.
Luminance	Controls the amount of Luminance noise reduction that is used
Luminance Detail	Set the standard for what is considered noise, move to the right to save detail
Luminance Contrast	Move to the right to save contrast & texture, to the Left to smooth things
Colour	Default of 25 for colour noise reduction, suppresses colour blotches vs saving colour edges
Colour Detail	Used in very noisy images, works to refine colour noise reduction along thin colour edges

## Bit Depth Sample Images

<p>8-bit 16.7 million colours</p>	 A high-quality, full-color photograph of a tabby cat with white paws, lying down and looking towards the camera.	<p>7-bit 2.1 million colours</p>	 A slightly less detailed version of the 8-bit image, with some loss of fine detail and color accuracy.
<p>6-bit 262 Thousand colours</p>	 The image shows more noticeable color banding and loss of detail compared to the 7-bit version.	<p>5-bit 33 Thousand colours</p>	 The image is significantly more compressed, with large areas of uniform color and very little detail.
<p>4-bit 4096 colours</p>	 The image is now almost entirely composed of large, flat color blocks, with almost no discernible features.	<p>3-bit 512 colours</p>	 The image is now almost entirely black and white, with only a few shades of gray visible.
<p>2-bit 64 colours</p>	 The image is now almost entirely black and white, with only a few shades of gray visible.	<p>1-bit 2 colours</p>	 The image is now a simple binary image, consisting only of black and white pixels, with no gray tones.



## Histograms Explained

The Histogram is the best way to confirm that your image has been exposed/processed properly. They describe image brightness.

After the sensors' pixels record the light, the onboard image processor calculates a graph of the exposure. This graphical representation of the pixels tones vs amounts is what is called a "Histogram".

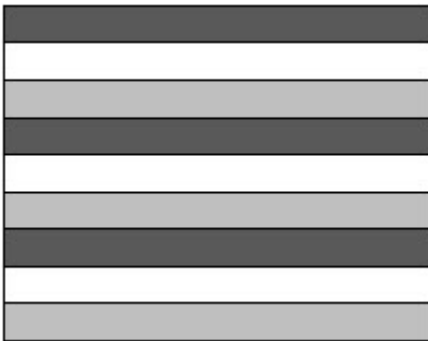
The various tones that were captured are represented along the Bottom Axis. The left starts with the darkest tones moving to the right for the brightest tones. Hence the phrase "Left to Right, Dark to Light".

The vertical axis is simply the amount of each of the tones recorded.

### ACTIVITY:

Below are three images, and below them a Histogram. Which of the 3 images does the Histogram represent?

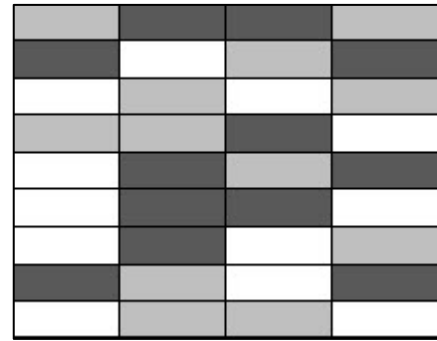
HINT: Count the tones, count the amount.



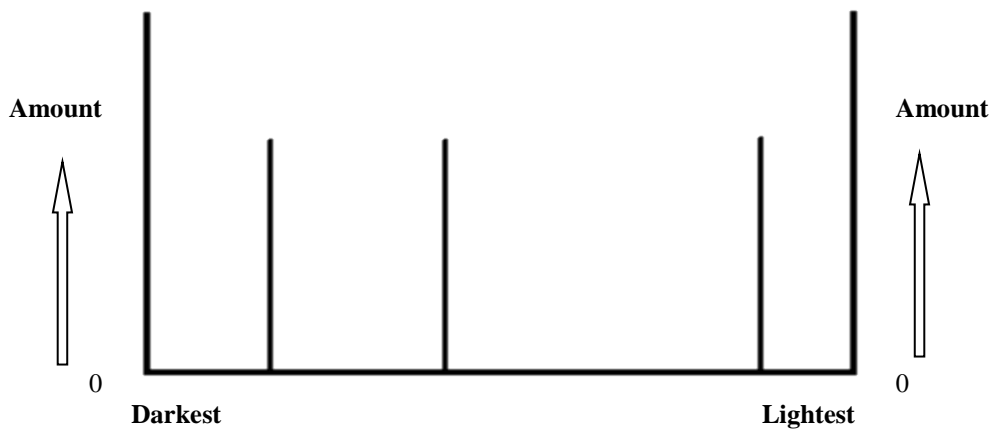
**Image 1.**



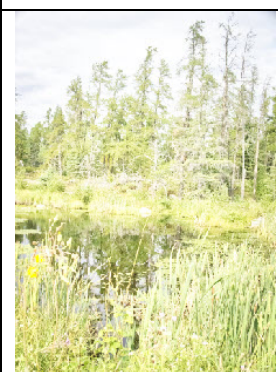

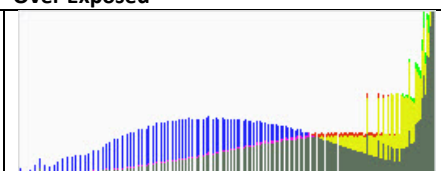
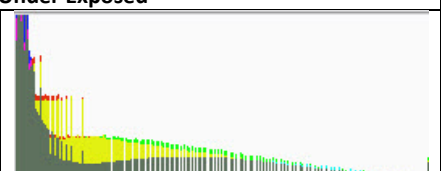
**Image 2.**



**Image 3.**



To ensure you get the best exposure/processing possible, always check your Histogram.

Over Exposed	Under Exposed
	
 <p>Pixels are distributed along the Histogram based on their Brightness value. Pixels stacked up on the very right indicate possible overexposure...</p>	 <p>Pixels stacked up on the left of a very dark image indicate possible underexposure...</p>

Since Images 1,2 & 3 each have the same \*amount\* of the three tones, all are correct!  
 The Histogram is about \*how much\* of each tones are present, not \*where\* they are located.



# Intro to Photoshop Elements 14: Week Three

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**BackUp Catalog:** Go to Menu & choose File>Backup Catalog (Ctrl+B), then do a **Full Backup**, after that do **Incremental**. (Save your Backup to an external hard drive, ensure that it is good by **carefully restoring it** to another location.)

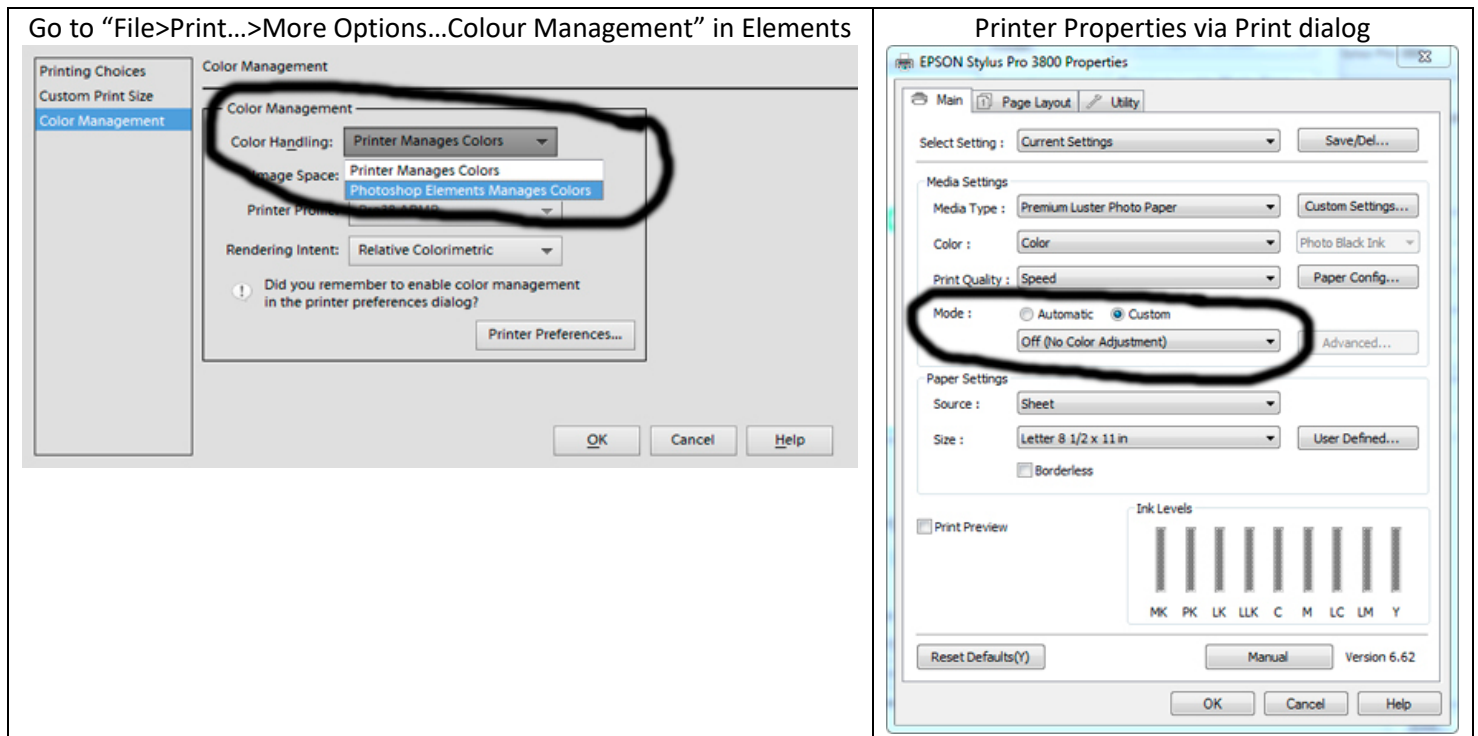
The **“Create”** button shows you projects like Slide Shows, Photo Books, Calendars, Cards & Collages. The Create “options” can be tricky, as they can work via either “Click & Drag” or via “Double-Clicking”.

The **“Share”** button allows you to send files to Social Media (Facebook, Twitter, Flickr, etc.), Email, PDF’s, etc...

**Resizing** – Image>Resize>Image Size...

- For a smaller image check the “Resample Image” checkbox, and choose “Bicubic Sharper (best for reductions)”. Computer monitors use 72dpi. For Email images use 800 pixels for the longest side.
- For a print enter the proper resolution value for your printer (Canon = 300pixels per inch, Epson = 360 pixels per inch) in the Document Size Resolution field.
- **You can also do “One Step Resizing” via the Crop Tool!**

## Print settings for Colour Management and Printer Properties



Photoshop Elements Manages Colors and in the Printer dialog box” Mode:” is Custom > OFF (No Color Adjustment) it may vary slightly based on the type of printer you have. **Elements** should handle color and **NOT** the printer!

**Printer Profiles** are the recipes that your computer uses to have the printer work properly with the chosen paper.

**Prints are too DARK?** Reduce monitor brightness. If not then duplicate Layer, Blend mode = Screen, reduce Opacity.

**Banding in Prints?** Add 4% Gaussian Monochromatic Noise. (Filter>Noise>Add Noise...)

# Review NOTES for Weeks One and Two:

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**Monitor Calibration** is essential for consistent colour while working on your photos. LCD monitors usually only require calibration every couple of weeks. The DataColor Spyder5 Express colorimeter is the current model (~\$179.00Cnd).

Photoshop Elements 2018 (\$99USD, or \$79USD for Upgrade) runs best if your computer has at least **4GB of RAM** and when your photos are stored on a separate internal physical hard drive. (8GB of RAM is better for working on RAW)

Every photo you take records the **camera created EXIF metadata**, and you can also add **personal IPTC metadata** to the photo when you import it, and when you **rate/tag** your images with **keywords**. You use this info to search your photos.

Photoshop Elements uses the concept of “**Cataloging**”, using the Metadata from the photos themselves, to keep things **organized by creating a catalogue index**. You see this index (catalogue) as thumbnail copies of your photos.

Remember to **back up your catalog**, and **confirm/verify** that it is indeed a good copy.

Adobe Camera RAW (which comes with Elements 14) needs updating regularly as new cameras/versions come out.

Remember to always change a **jpeg** into either a “tiff” or a “psd” (File>Save As...) format before making adjustments to it. This will prevent you from unintentionally creating destructive “compression artifacts” in the image.

If you work with RAW **keep the image in 16-bit** as long into the editing process as you are able, then go to “Image>Mode>8-Bits/Channel” to allow you to continue doing the rest of your Local edits.

Employ a consistent workflow, performing **Physical edits**, then **Global edits** before finally doing **Local edits**.

**Layers** allow you to perform one editing task independently from your other editing tasks.

**Opacity** controls how strongly that edit is applied to the layer.

**Masks** allow you to limit the area of the image to which the edit is applied (Masks allow for Local edits)

**Selecting** the area to be edited before making an adjustment layer will automatically create a mask.

**Feathering** the selection (Select>Feather) makes a smoother transition around the edge of the selection.

**Sharpening** is done at 100% view, and is the last step before the image is printed or distributed on the Web.

Photo Style of Sharpening	Amount %	Radius pixels	Detail
Average	125	1	Hold Alt key down and Adjust Detail to your Taste View Image at 100% while adjusting
People up close	75	2	
Medium Scenic	225	0.5	
Edges, lots of edges	65	4	
General Purpose	85	1	

If you have questions email me by going to [www.thenerdworks.com](http://www.thenerdworks.com) and click on “Contact”. Mention the course title.

**Course Evaluation:** Please fill out the evaluation keeping in mind the **value of the time** that you have given up in order to be here. Your time is valuable, and I want these courses to be worth your time!

**NOTE:** This course is a direct result of comments made in previous course evaluations, so please feel free to add yours!

# 3,2,1...Backup strategy

**3** Copies of every photograph



**2** different types of storage media

(Prevents loss from obsolescence of technology)



**1** set photos at different location

