

PLANO PHOTOGRAPHY CLUB

PHOTOSHOP TRAINING: BASIC

April 25, 2015





TARGET AUDIENCE

- ◆ *Relatively inexperienced users of Photoshop (or Photoshop Elements), or those with some experience who want to “fill in some gaps”.*
-

TRAINING GOAL & APPROACH

- ◆ Your Goal: *Gain awareness of some basics that Photoshop tool allows you to do. Then practice.*
- ◆ Approach: *Detailed presentation will minimize any note-taking needed; this presentation will be uploaded to PPC website in PDF format. Specific hands-on training exercises so you can avoid multi-tasking!*

AGENDA



- ◆ PS Preferences 10:10 AM
- ◆ Screen Layout, Basic Tools & Shortcuts 10:25
- ◆ Sample Workflow 10:35
- ◆ Simple Images Adjustments 10:40
- ◆ Hands-on Exercise 10:55
- ◆ Making Simple Selections 11:10
- ◆ Break 11:25
- ◆ Noise Reduction & Sharpening 11:40
- ◆ Layers, Styles & Masks 11:50
- ◆ Hands-on Exercise 12:20 PM
- ◆ Resizing: Image & Canvas 12:35
- ◆ Printing Considerations 12:50

SKILLS SURVEY



Raise your hand if you don't know how to...

- Use the Slice tool
- Add a shadow to a layer
- Resize an image without losing resolution
- Use masks
- Use layers
- Refine Edge for a selection
- Crop an image
- Open and Save an image file



PS PREFERENCES

All Screen Shots from Photoshop CC 2014

☑ Color Space-

- ◆ Settings. *Select* → “North American Prepress 2”
- ◆ Adobe RGB (1998) is a larger color space sRGB
- ◆ ProPhoto RGB is an even larger; recm’d if you use Lightroom.

access via Edit / Color Settings in top Command row

The screenshot shows the 'Color Settings' dialog box with the following configurations:

- Settings:** North America Prepress 2
- Working Spaces:**
 - RGB: Adobe RGB (1998) (indicated by a red arrow)
 - CMYK: U.S. Web Coated (SWOP) v2
 - Gray: Dot Gain 20%
 - Spot: Dot Gain 20%
- Conversion Options:**
 - Engine: Adobe (ACE)
 - Intent: Relative Colorimetric
 - Use Black Point Compensation
 - Use Dither (8-bit/channel images)
 - Compensate for Scene-referred Profiles
- Color Management Policies:**
 - RGB: Preserve Embedded Profiles
 - CMYK: Preserve Embedded Profiles
 - Gray: Preserve Embedded Profiles
 - Profile Mismatches: Ask When Opening Ask When Pasting
 - Missing Profiles: Ask When Opening
- Advanced Controls:**
 - Desaturate Monitor Colors By: 20 %
 - Blend RGB Colors Using Gamma: 1.00
 - Blend Text Colors Using Gamma: 1.45

At the bottom, there is a warning: "Unsynchronized: Your Creative Suite applications are not synchronized for consistent color." and a description: "North America Prepress 2: Preparation of content for common printing conditions in North America. CMYK values are preserved. Profile warnings are enabled."

Important to check boxes, so you control changes in color space.

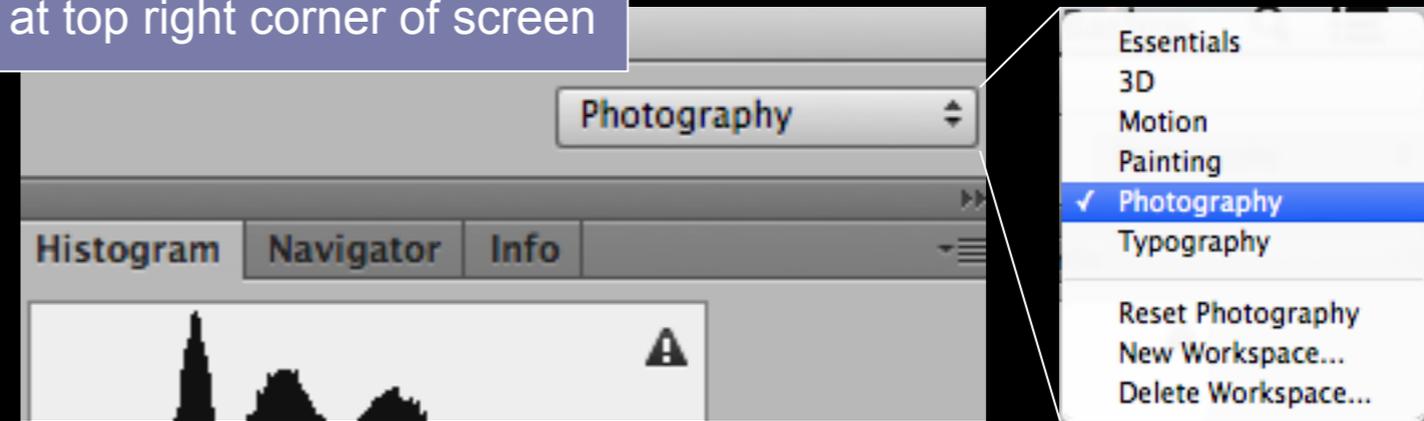
PS PREFERENCES



✓ **Workspace-**

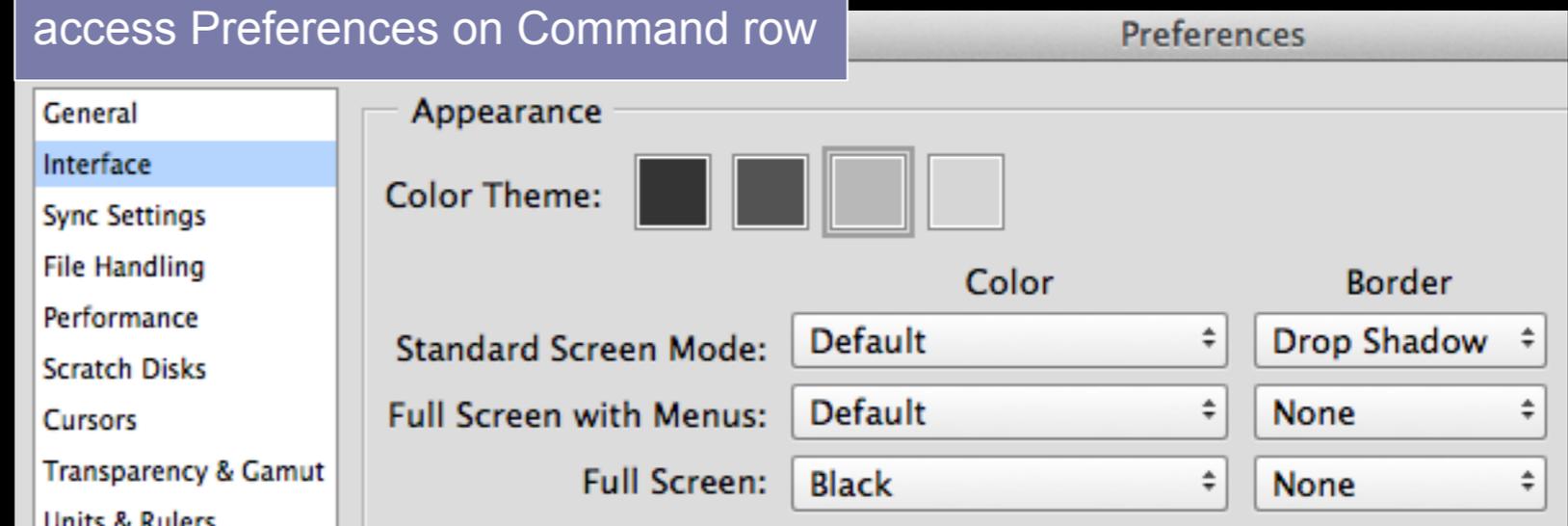
Select → "Photography"

access at top right corner of screen



✓ **Interface-** your chance to pick Color Theme of PS and screen background colors

access Preferences on Command row

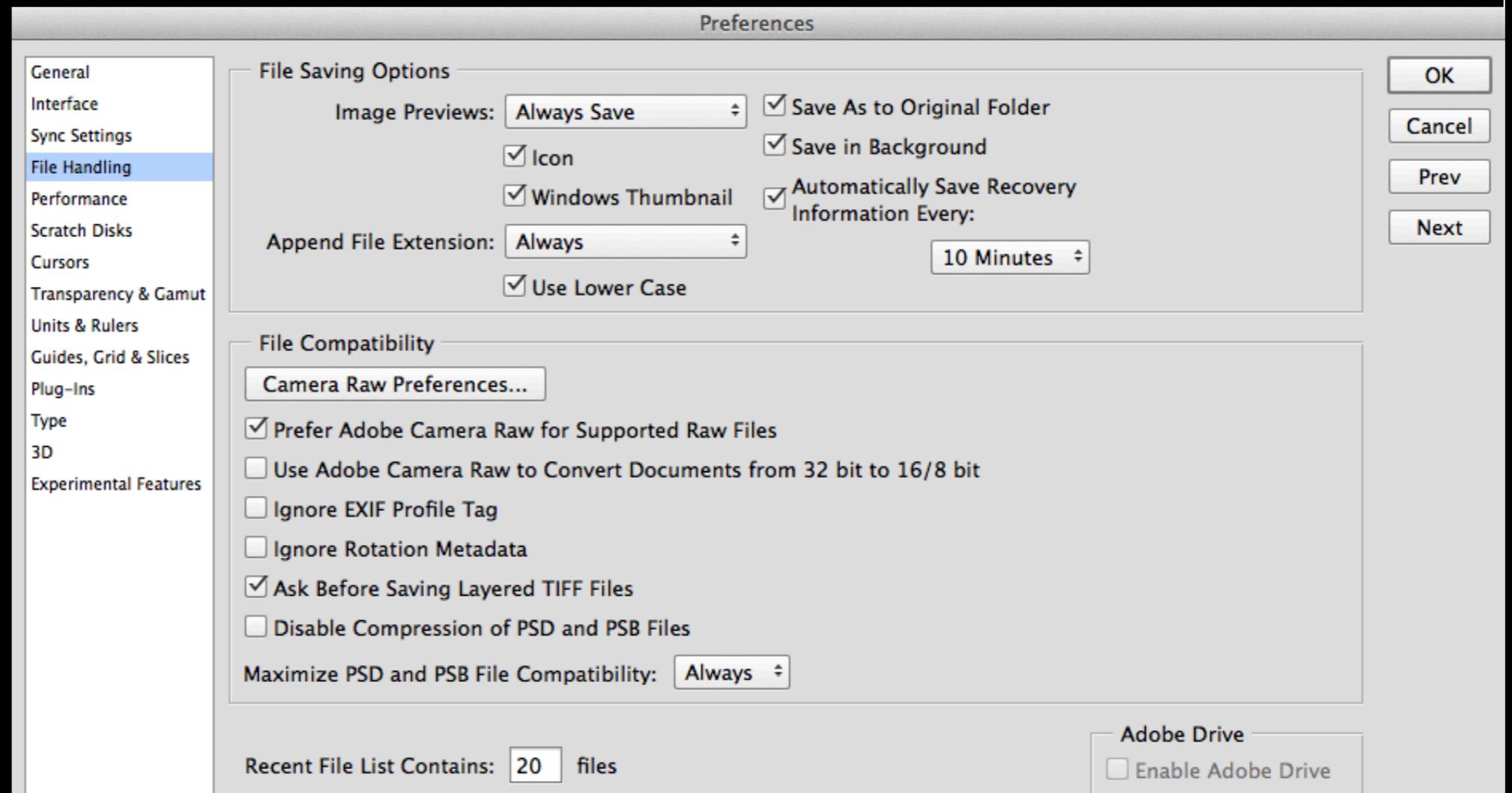


PS PREFERENCES



☑ File Handling-

- ◆ Maximize PSD...
File compatibility:
Select "Always"
if you use Lightroom
- ◆ Recent File List
Contains: Increase
to 20 or 25 files
to save you time
finding files



PS PREFERENCES



☑ Performance-

- ◆ Let Photoshop Use: more is better for Photoshop; depends on how many apps you use at a time

- ◆ History & Cache:
Default usually best,
but see Description.
History States:
if you like to *Undo*,
set higher.
Cache Levels/Tile Size:
see Description.

The screenshot shows the Photoshop Preferences dialog box with the Performance section selected. The left sidebar lists various preference categories, with "Performance" highlighted. The main area is divided into three sections: "Memory Usage", "History & Cache", and "Graphics Processor Settings".
Memory Usage: Shows "Available RAM: 15114 MB" and "Ideal Range: 8312-10882 MB". The "Let Photoshop Use:" slider is set to 11400 MB (75%).
History & Cache: Includes "Optimize Cache Levels and Tile Size for documents that are:" with buttons for "Tall and Thin", "Default", and "Big and Flat". On the right, "History States" is set to 200 and "Cache Levels" is set to 4. "Cache Tile Size" is set to 128K.
Graphics Processor Settings: Shows "Detected Graphics Processor: ATI Technologies Inc. ATI Radeon HD 4670 OpenGL Engine" and a checked "Use Graphics Processor" option with an "Advanced Settings..." button.
An information icon (i) at the bottom right notes: "Set Cache Levels to 2 or higher for optimum GPU performance."



PS SCREEN LAYOUT

The screenshot shows the Adobe Photoshop CC 2014 interface with a white lily flower image open. The interface is annotated with several callout boxes:

- Command Row**: Points to the top menu bar (File, Edit, Image, Layer, Type, Select, Filter, 3D, View, Window, Help).
- Options for selected Tool**: Points to the top toolbar area showing tool settings like Mode, Opacity, and Flow.
- Tools Panel**: Points to the vertical toolbar on the left side of the canvas.
- Workspace selector**: Points to the "Photography" workspace dropdown in the top right.
- Histogram, Navigator & Info**: Points to the top right panels showing a histogram, a navigator window, and an info panel.
- Layers, History & other palettes**: Points to the middle right panels including the Layers, Channels, Paths, History, and Actions palettes.
- Brushes, Color & other palettes**: Points to the bottom right area where the Brushes, Color, and Swatches palettes are located.
- Layer & Full Image file sizes**: Points to the status bar at the bottom left showing "Doc: 14.1M/14.1M".
- Image Zoom setting**: Points to the zoom percentage "25%" in the status bar.
- Layers options**: Points to the bottom right corner of the Layers panel.

PS TOOLS PANEL



Tools Panel Groups

Selection
Crop & measuring
Retouching & painting
Drawing & shape
Move & Zoom
Foregnd/Backgnd colors
Quick Mask
Screen Modes

Crop Tool (C)

Eyedropper Tool (I)

Brush Tool (B)

History Brush Tool (Y)

Paint Bucket Tool (G)

Dodge Tool (O)

Text Tool (T)

Shape Tool (U)

Zoom Tool (Z)

Quick Mask Mode (Q)



Move Tool (V)

Marquee Tool (M)

Lasso Tool (L)

Magic Wand Tool (W)

Healing Brush Tool (J)

Clone Stamp Tool (S)

Eraser Tool (E)

Blur Tool (*none*)

Pen Tool (P)

Path Selection Tool (A)

Hand Tool (H)

Switch Foregnd/Backgnd Colors (X)
Default Colors (D)

Screen Modes (F)

PS KEY TOOLS



★ Basic Tools to Learn

- ★ Crop Tool (C)
- Eyedropper Tool (I)
- ★ Brush Tool (B)
- History Brush Tool (Y)
- ★ Paint Bucket Tool (G)
- ★ Dodge Tool (O)
- Text Tool (T)
- Shape Tool (U)
- ★ Zoom Tool (Z)
- Quick Mask Mode (Q)



- Move Tool (V) ★
- Marquee Tool (M) ★
- Lasso Tool (L) ★
- Magic Wand Tool (W) ★
- Healing Brush Tool (J) ★
- Clone Stamp Tool (S) ★
- Eraser Tool (E) ★
- Blur Tool (none) ★
- Pen Tool (P)
- Path Selection Tool (A)
- Hand Tool (H) ★
- Switch Foregnd/Backgnd Colors (X) ★
- Default Colors (D) ★
- Screen Modes (F)

MY FAVORITE SHORTCUTS/TOOLS



1, 2, ..., 0 set Opacity % for many tools: Brush, Clone Stamp, Eraser

Shift-1, 2, ..., 0 set Flow % for many tools: Brush, Clone Stamp, Eraser

Quick Selection Tool
--
option under Magic Wand Tool (W)

Rotate Tool (R) allows image to rotate to facilitate selection, brush work, etc.

	1 10% Opacity	2 20% Opacity	3 30% Opacity	4 40% Opacity	5 50% Opacity	6 60% Opacity	7 70% Opacity	8 80% Opacity	9 90% Opacity	0 Fit on screen 100% Opacity	- Zoom In	= + Zoom Out	Backspace
Tab	Q	W Magic Wand	E Eraser	R Rotate Tool	T	Y	U	I Invert	O	P	[-Brush Size] + Brush Size	
Caps Lock	A	S Save Clone Stamp	D De- Select Default Colors	F	G Paint Bucket	H Hand	J Copy Layer Healing Brush	K	L Lasso Tool	;	'	Enter	
Shift		Z Un-do Re-do	X Cut Switch FG/BG	C Copy Crop Tool	V Paste Move	B Brush Tool	N	M Marquee Tool	,	<	.	>	/ ? Shift
Ctrl	Command (Mac)	Alt Option (Mac)	Hold to Move Marquee While Selecting							Alt Option (Mac)	Command (Mac)	Ctrl	

[] changes Brush size
--
Shift-[Shift-] changes
Brush hardness

Ctrl-Shift-I (Cmd-Shift-I)
Inverts a selection

Ctrl-Alt-Z (Cmd-Opt-Z)
Steps thru multiple Un-do's

Default Colors (D) – B&W
--
Switch Foreground/Background Colors (X)



PS SAMPLE WORKFLOW

- ◆ White Balance – **Color** temperature and tint
- ◆ Exposure – **Tone**, highlights and shadows
- ◆ Contrast – **Levels, Curves, Contrast**
- ◆ Noise Reduction – using **Reduce Noise Filter**
- ◆ Sharpening – using **Smart Sharpen Filter**
- ◆ Selective Adjustments – **Dodge, Burn, Adjustment layers**
- ◆ Frame Composition – **Crop** including straightening
- ◆ Enhancements – to improve/change composition, e.g., Clone, blending, ...
- ◆ Resizing – **Resize Image** to fit use, e.g., printing, email, Internet

Highlighted topics
covered in this
Training

Note: Some steps can be done in Camera Raw and/or Lightroom



PS SIMPLE IMAGE ADJUSTMENTS

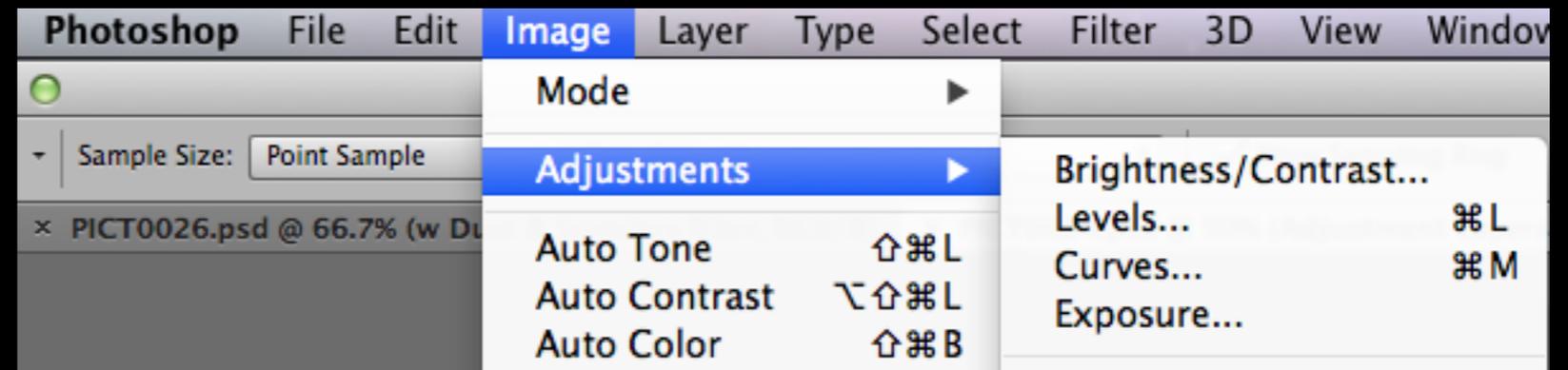
☑ Image...

◆ Adjustments →

- ◆ Individual Adjustments
or
- ◆ Auto Adjustments

◆ Are Auto adjustments just as good?

- ◆ Auto Before / After →
- ◆ But you lose opportunity to adjust to your individual taste, or for a specific effect





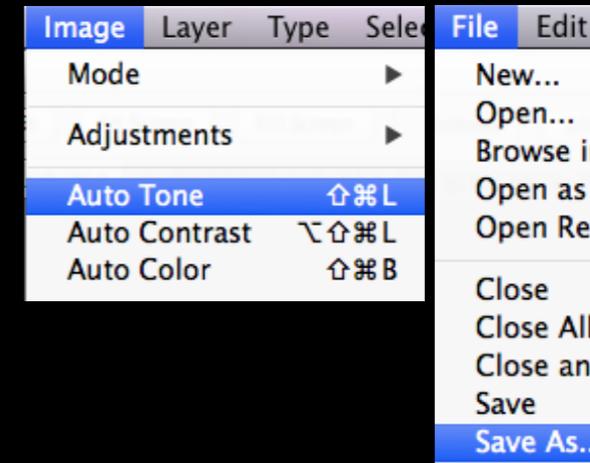
PS HANDS-ON: ADJUSTMENTS

☑ Open Lily image

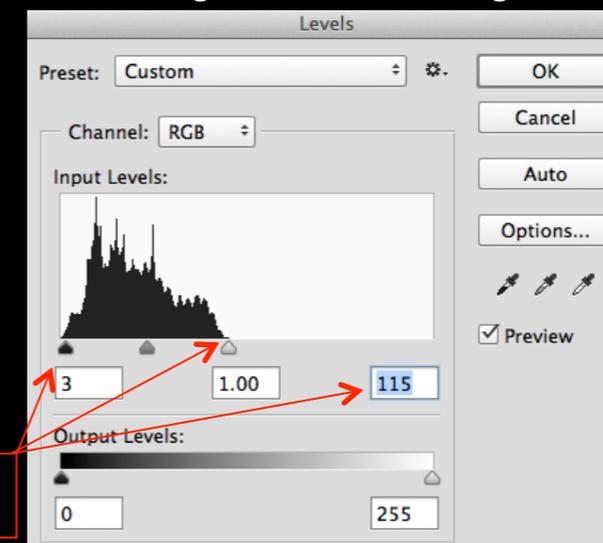
- 1 Apply **Auto Tone**, **Auto Contrast**, & **Auto Color**, noting effect after each step
- 2 **Save As...** "Lily Auto" →

☑ Open original Lily image again

- 1 Select **Adjustments / Levels** from **Image** menu
- 2 Use left and right sliders to cause tonal range in image to span full Black-to-White tonal range → (Press & Hold Alt/Opt key to see clipped pixels; *Important!* don't clip pixels on right side)
- 3 **Save As...** "Lily Levels"



Histogram after changes



Note slider positions, values

Holding Alt/Opt key changes Cancel to Reset



PS MAKING SIMPLE SELECTIONS

☑ Tool depends on selection...

◆ Quick Selection Tool

- ◆ For selecting broad areas (purple jacket)

◆ Polygon Lasso Tool

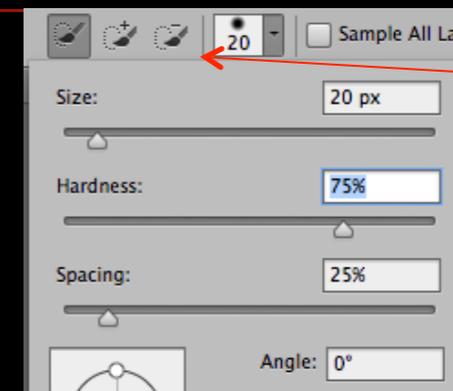
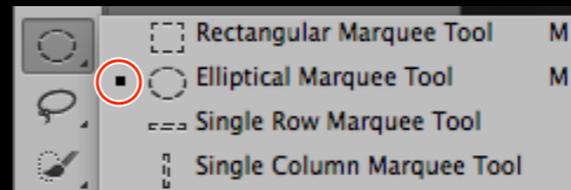
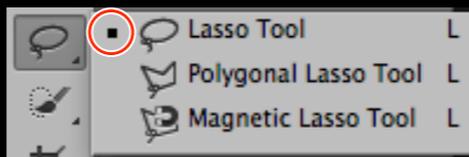
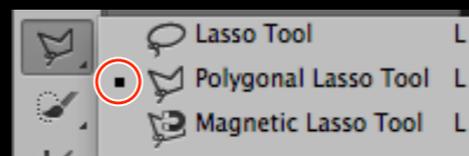
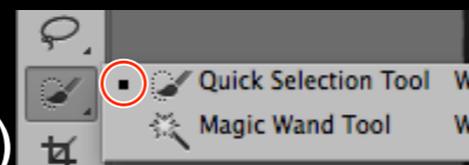
- ◆ For straight edges (white shirt)

◆ Lasso Tool

- ◆ For freehand drawing (blue tie)

◆ Marquee Tool

- ◆ For ovals, rectangles, rows (buttons)
- ◆ Hold Shift* to make an Oval into a Circle
- ◆ Hold Alt/Opt* to make Circle centered on starting point



For selection tools, set type of selection: regular, add, subtract, (intersect)

For Brush-based tools, set Size & Hardness (feather)



◆ Break

11:25



PHOTOSHOP TRAINING: BASIC

BREAK TILL 11:40



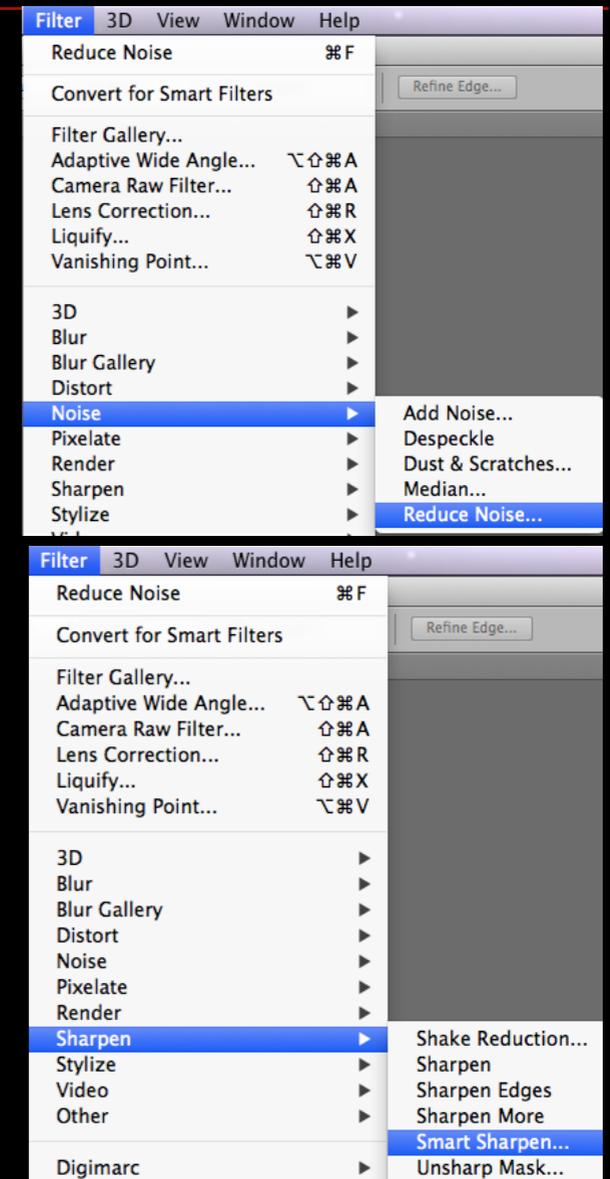
PS REDUCE NOISE & SHARPEN

☑ Reducing Noise

- ◆ Lessens Luminance and Color Noise
- ◆ Due to low light and/or high ISO shooting

☑ Sharpening

- ◆ Gives appearance of image being in better focus by increasing contrast where edges are detected
- ◆ Use only after using reducing noise, so you're not sharpening noise
- ◆ Capture Sharpening: addresses impact of camera's imperfect 'capture' of image (vs. Output Sharpening)

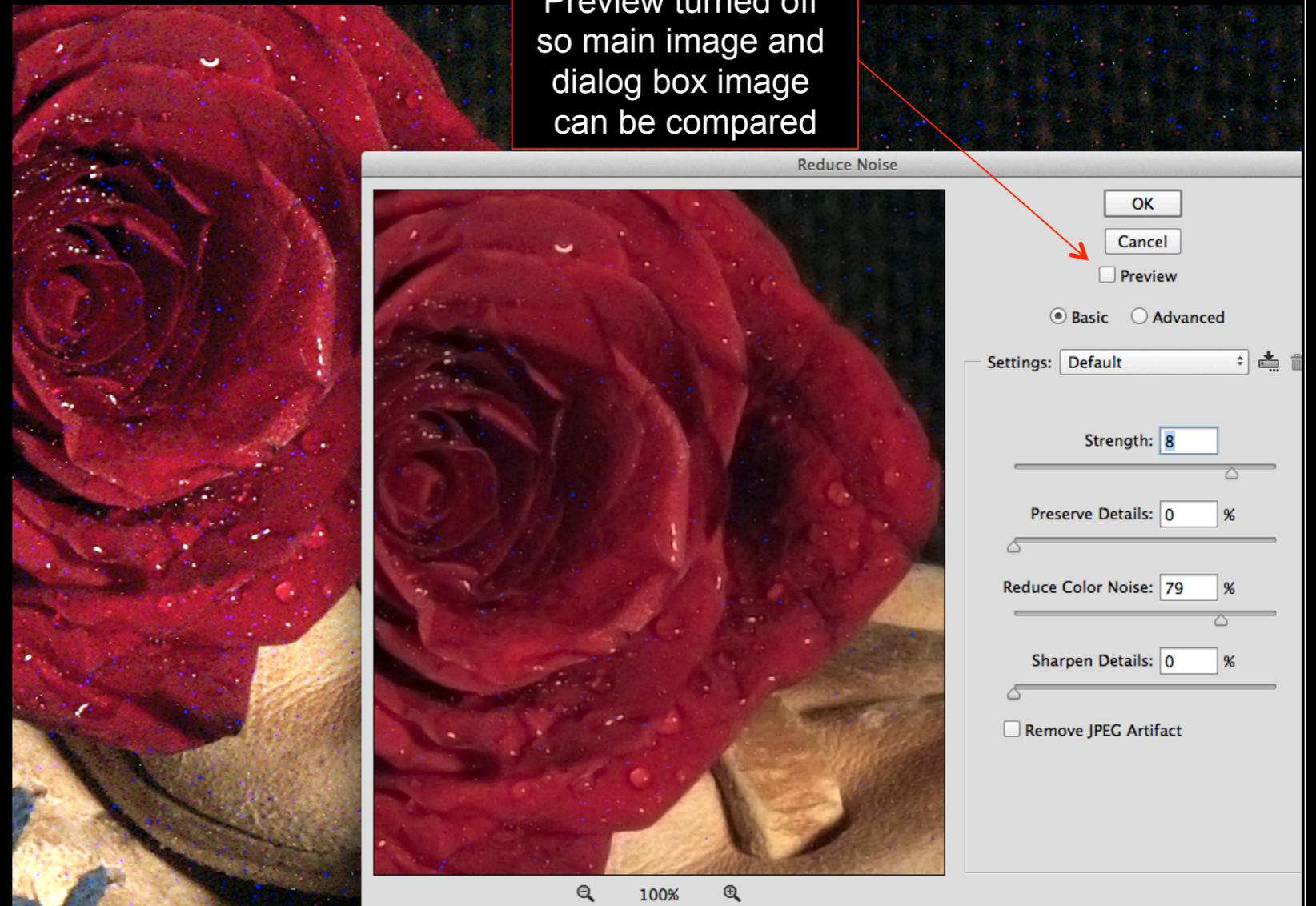


PS REDUCE NOISE



☑ Reduce Noise Filter

- ◆ Image in dialog box shows effect unless you're clicking/dragging it
- ◆ Start by moving all sliders to 0
- ◆ Move Reduce Color Noise slider to right to reduce red & blue dots
- ◆ Move Strength slider to right to reduce white dots
- ◆ Move Preserve Details slider until too many white dots return
- ◆ Don't use Sharpen slider at all, since we'll sharpen in next step



PS SMART SHARPEN



☑ Smart Sharpen Filter

- ◆ Image in dialog box shows effect unless you're clicking/dragging it around image
- ◆ View at 100% to enable assessment of Sharpen
- ◆ Radius slider controls size of the edges you affect (smaller # affect smaller detail)
- ◆ Amount slider sets overall sharpening strength; normally start at 100%
- ◆ If sharpening has re-introduced noise, use Reduce Noise slider to lessen it

Preview turned off.
Note effect of sharpening on glove texture.

Smart Sharpen

Preview

Preset: Custom

Amount: 110 %

Radius: 2.5 px

Reduce Noise: 15 %

Remove: Lens Blur 0

► Shadows / Highlights

Adjust size of dialog box by dragging corner



PS LAYERS, STYLES, & MASKS

✓ Layers

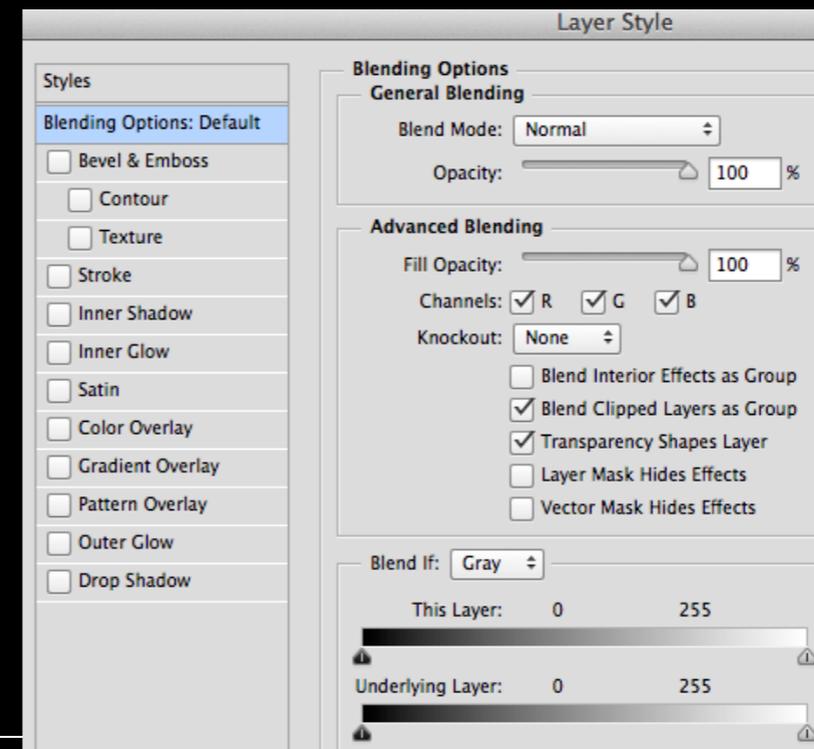
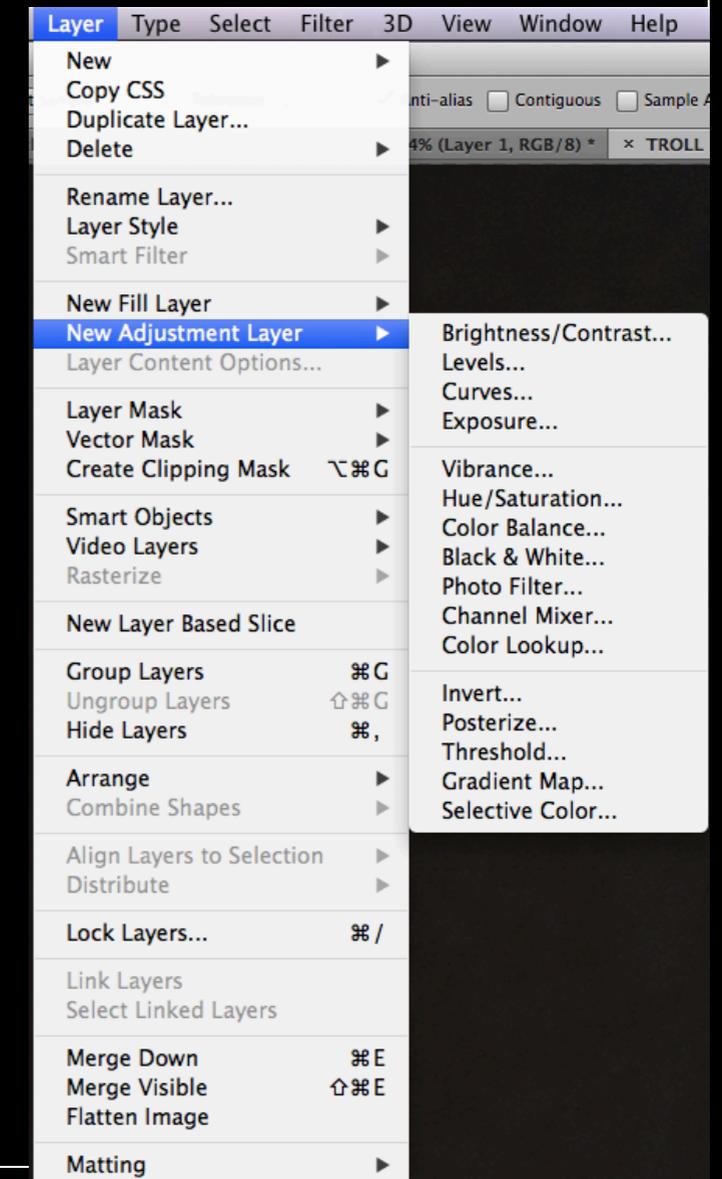
- ◆ Enables stacking parts of an image (sheets of acetate)
- ◆ Transparency/Opacity determines ability to see layers “below”
- ◆ Types include Fill and Adjustment Layers →

✓ Layer Styles

- ◆ Enables appearance changes →

✓ Masks

- ◆ Layer Mask uses value of gray to determine transparency of layer(s)
- ◆ Clipping Mask is similar but ties effects to specific layer



PS LAYERS



✓ Layers Palette

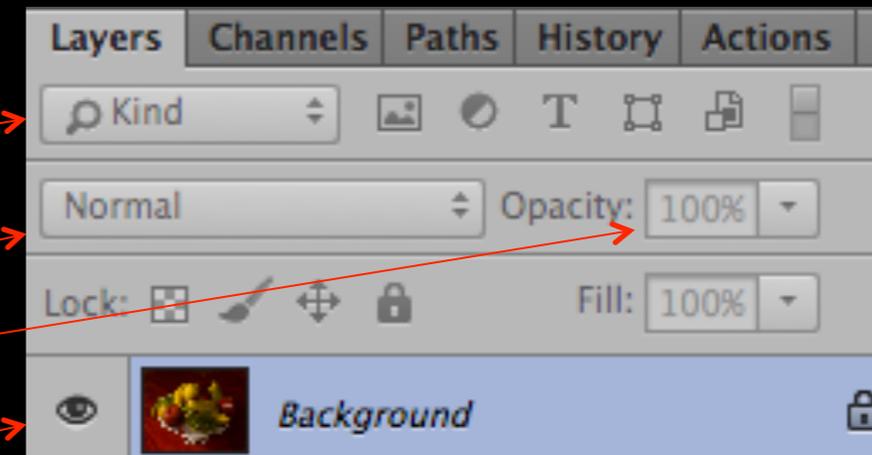
- ◆ Background layer is “locked”; can’t be changed.
- ◆ For other layers...

Kind drop-down to filter on layer types
(only needed if a lot of levels present)

Blending mode drop-down

Opacity (layer transparency)

“Eye” determines whether layer visible



✓ Adjustment Layers

- ◆ Non-destructive. Enables future changes or removal of changes, so much better alternative than destructive Image Adjustments.
- ◆ Enables reducing effect of Adjustment on elected parts of the image.

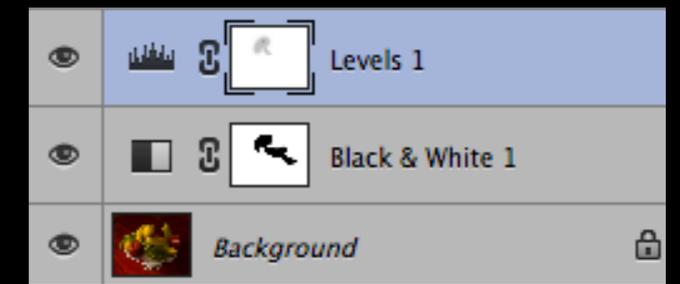
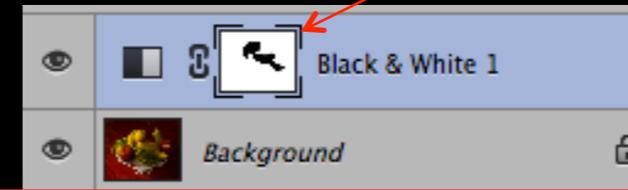
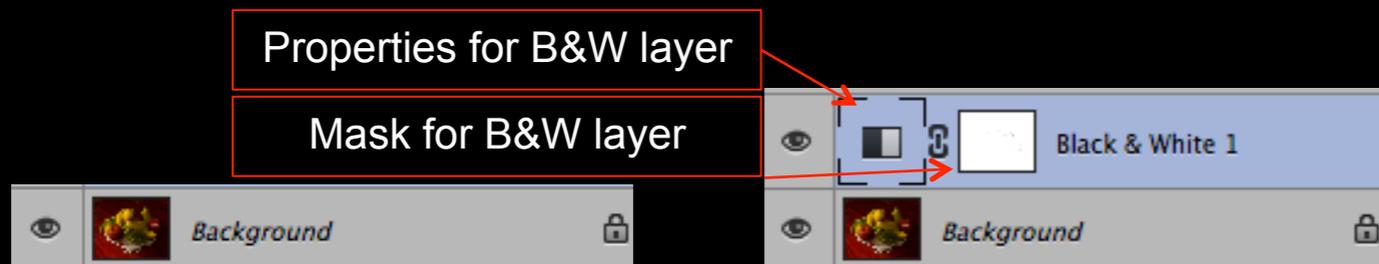
PS LAYERS



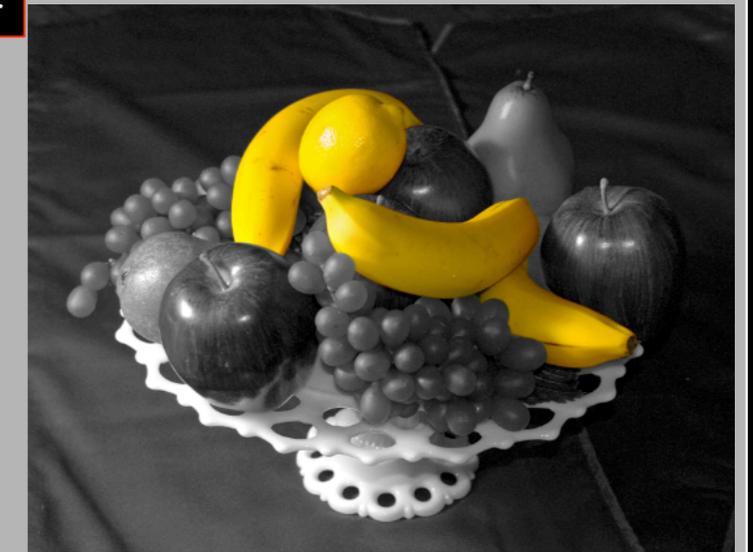
✓ Adjustment Layers

- ◆ Non-destructive. Enables future changes or removal of changes.
- ◆ Also enables reducing effect on different parts of the image.

White reveals,
Black conceals.



So Yellow fruit color shows, because Black is concealing effect of B&W layer





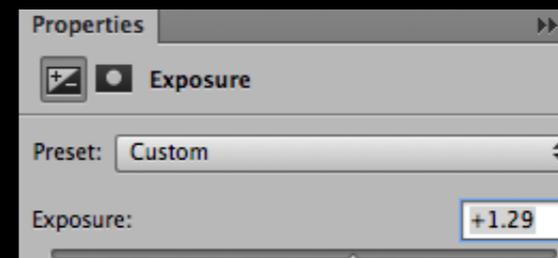
PS HANDS-ON: LAYERS & MASKS

☑ Open Fruit image

- 1 Select **Layer / New Adjustment Layer / Black & White**
- 2 Select **Brush Tool**, then press "D" to get Default colors of Black & White (Black should be in Foreground)
- 3 Click on Mask in Black & White layer
- 4 Using **Brush**, paint Black on Mask to expose Green grapes
- 5 If you paint too much, use **Brush** to paint White to correct (Press "X" to switch between Black and White colors)
- 6 Select **Layer / New Adjustment Layer / Exposure** and Exposure slider to brighten image
- 7 **Save As...** "Green Grapes"



Foreground & Background

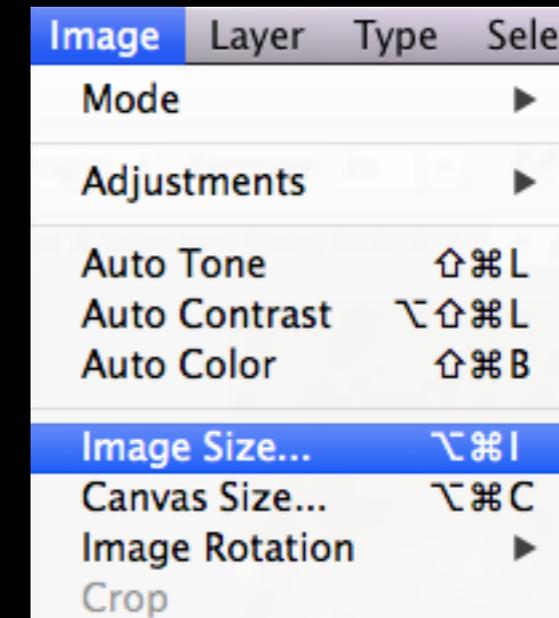




PS RESIZING IMAGE & CANVAS

☑ Resizing Image

- ◆ Changes image dimensions or pixel count
- ◆ Why?
 - ◆ Need more/fewer pixels to Print
 - ◆ Need to submit/use image of different size
 - ◆ Want to email smaller image
- ◆ Although PS CC improved, enlargements risk softness



☑ Resizing Canvas

- ◆ Expands width and/or height to gain working area
- ◆ Provides more area on “canvas” for image pixels
- ◆ Opposite of Cropping imaging

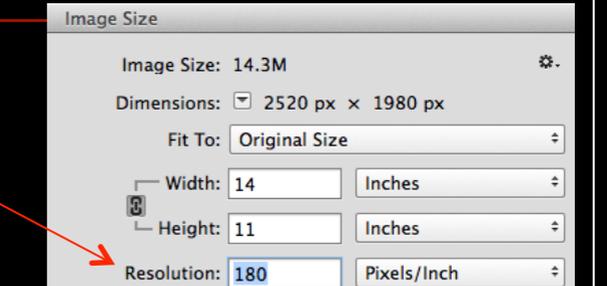
PS RESIZING IMAGE



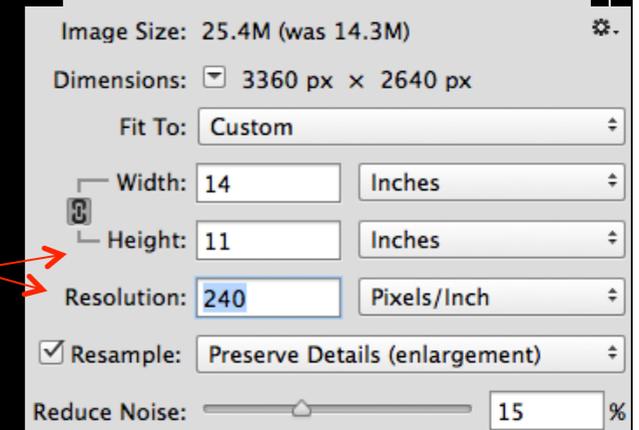
✓ Resizing Steps

- ◆ Select **Image / Image Size** and Dialog box
- ◆ Caution! **Resample** checked means image resolution will change, up or down:
 - ◆ If you're reducing image size (eg, to Print) of a relatively low-res image, you may lose valuable pixels!
- ◆ When **Resample** is checked, **Automatic** is usually best choice, unless Enlarging image

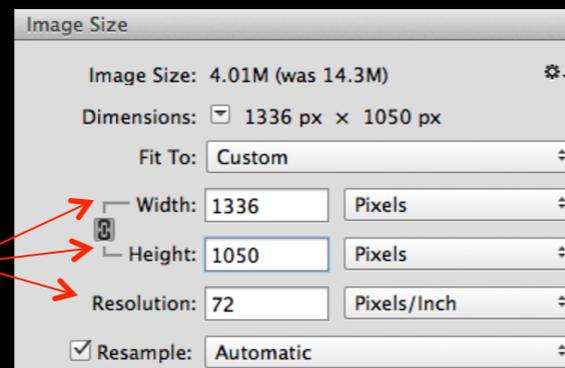
Original Image: 14" x 11"
but 180 pixels/inch
is too few to print



Solution: enter 240,
check Resample, and
select Preserve Details
(enlargement)



For Club contest, check **Resample** and set to 72 (normal screen resolution) and then try 1400 W or 1050 H, selecting the one where other measurement is < or = to max allowed

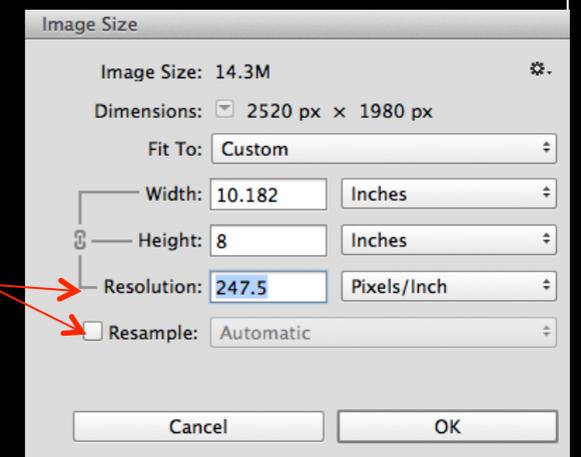


To Constrain Proportions,
click on link



Or: Resize Image to 10" x 8" which yields 247 pixels/in (Resample not checked!)

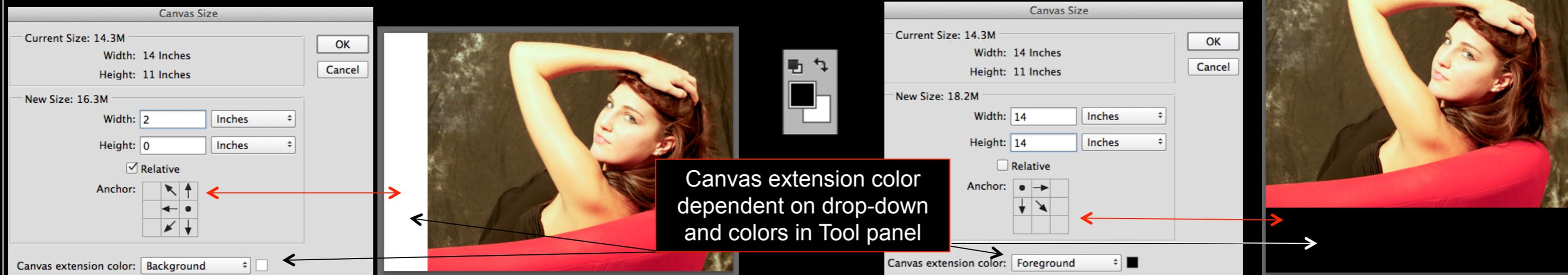
Stays at 180 pixels/in if Resample checked



PS RESIZING CANVAS

☑ Resizing Steps

- ◆ Select **Image / Canvas Size** and Dialog box
- ◆ Check **Relative** if you only specify addition to Width/Height (below left)
- ◆ Uncheck **Relative** if you specify total Width/Height (below right)
- ◆ New canvas added in direction of arrows next to Anchor

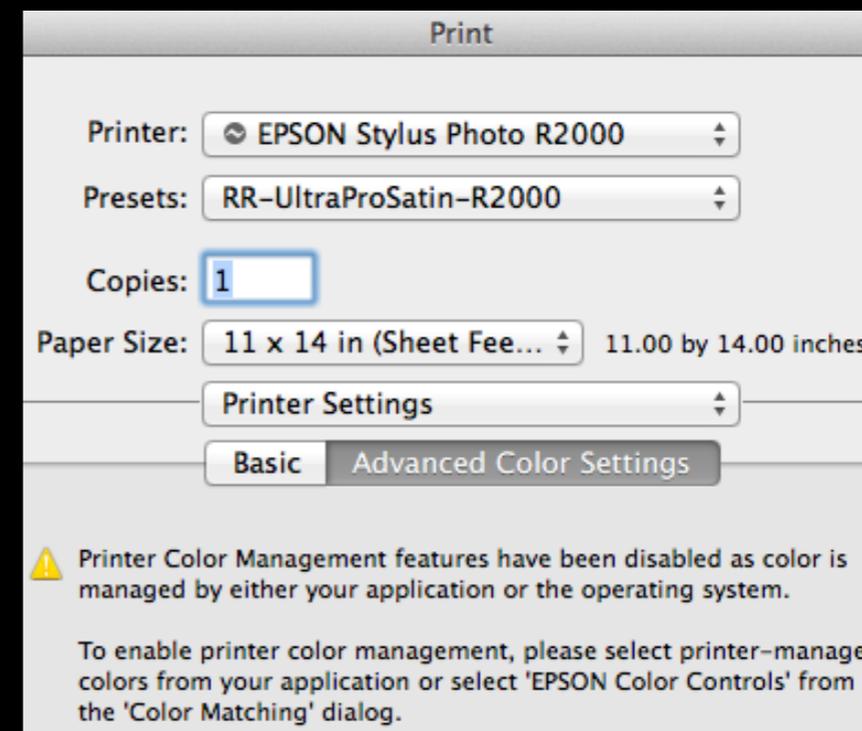
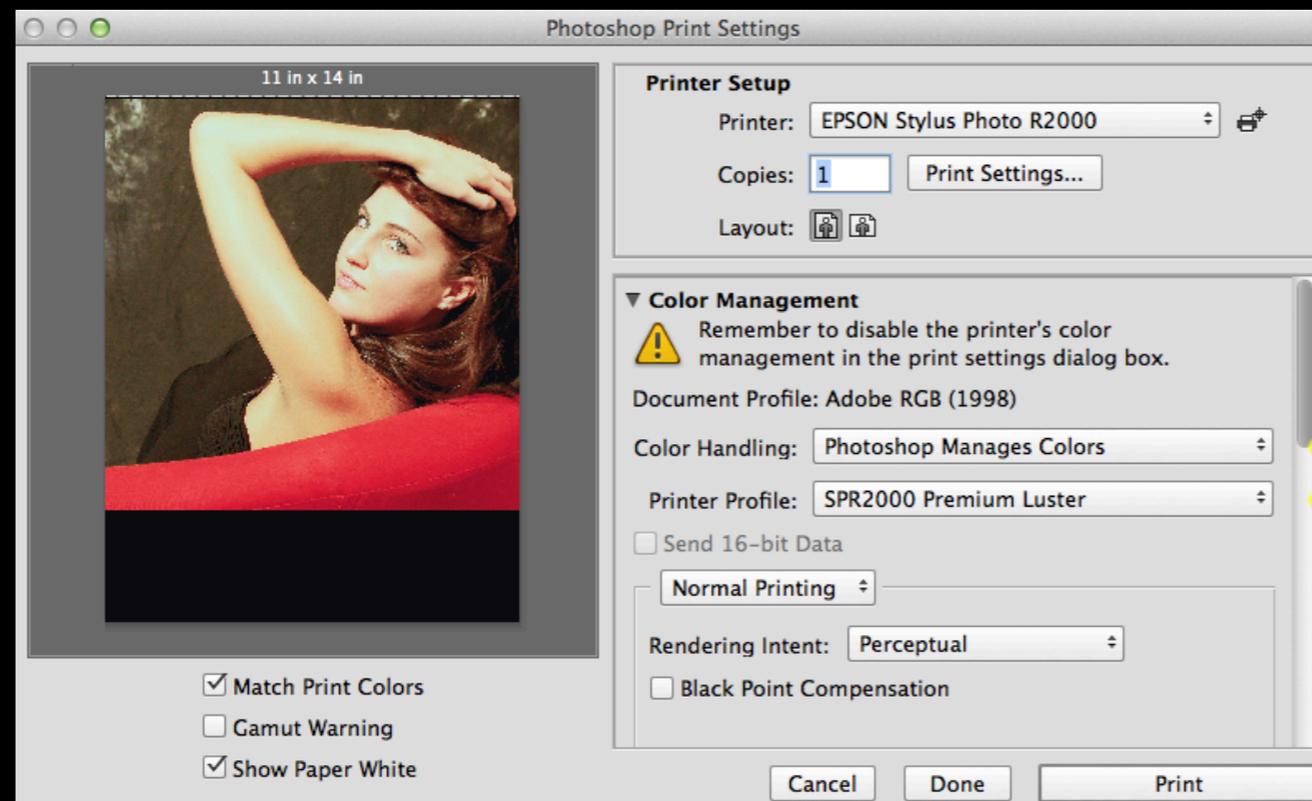




PS PRINTING

✓ Key Considerations

- ◆ Ensure Print settings say “Photoshop Manages Color”
- ◆ Ensure the Printer Profile you use is for your printer and matches paper



PLANO PHOTOGRAPHY CLUB

PHOTOSHOP TRAINING: BASIC

Download this PowerPoint training presentation from
Training & Resources (Club Members Only)

<http://www.planophotographyclub.com/members/training/>

Username/Password: ppc/camera

