## In Search of...

## the PERFECT B&W Print

### By Jeff Schewe

Additional Notes: schewephoto.com/workshop

#### The Object is to Convert from Color...



#### To Optimized B&W



#### To Final Print...in Neutral Tones



#### Or Warm Tones...



#### Or Sepia Tones...



#### Or Cold Tones...



#### Or Split Tones...



#### But First, You Must Learn to Convert...

## **Color to B&W.**

### When You Shoot Color You <u>Also</u> Capture a Variety of B&W Flavors...





#### The Green Channel Represents a Wratten 61 Separation Filter

66.67% 📵 Adobe RG8 (1998) (8bpc) 🛛









#### Photoshop's "Default" Panchromatic Conversion...



#### Red: 30% Green: 60% Blue: 10%



#### You <u>CAN</u> Use Negative Numbers...

#### Other Methods of Color to B&W Conversions...

#### Hue / Saturation

	H	lue/Saturation	
Edit:	Master 🛟	)	ОК
	Hue:	0	Cancel
	Saturation:	-100	Load Save
	Lightness:	0	
		J J.	Colorize

#### **De-Saturation**

#### **Convert to Lab**



#### DUAL Hue / Saturation Adjustment Layers



#### The "Russell Brown" Method.

#### Photoshop CS3's

Blac	k and White	
Preset: Custom	÷) 🗉	ОК
Reds:	24	% Cancel
۵		Auto
Yellows:	61	% Preview
۵	1111-12	
Greens:	26	%
۵		
Cyans:	54	%
۵		
Blues:	<b>1</b> 9	%
6		-
Magentas:	52	%
<u>ه</u>		
Tint Tint		
Hue	°	
Saturation	%	

#### Black and White adjustment.

# However, These B&W Conversion Methods are GLOBAL...

66.67% 🔞 Adobe RG8 (1998) (8bpc) 🕨

colored-bottles.psd @ 66.7% (Hue/Saturation 1, Layer Mask/8)

## You Can <u>Not</u> Easily Fine-Tune the **Results**, **LOCALLY**.

## Using Color Channels as **B&W Layers...** Easy to Fine-Tune Locally.

66.67% 🔞 Adobe RG8 (1998) (8bpc) 🕨

#### Start With an RGB Color Image...





#### Then Duplicate the Original Color Image.

#### You'll Have The Original Color Image...



#### And a Duplicate of the Original Color Image.

🐞 Photoshop File Edit	Image Layer Select Filter View Window H	lelp
Feather: 0 px	Mode > Bitmap	Heig
	Adjustments  Grayscale Duotone	
	DuplicateIndexed ColorApply Image✓ RGB ColorCalculations✓ CMYK Color	
	Image Size て第1 Canvas Size て第C Lab Color Multichannel	
	Pixel Aspect Ratio	
	Crop 32 Bits/Channel	
	Reveal All Color Table	
	Variables Apply Data Set	
	Trap	

Then, Convert the Duplicate Image to Grayscale...



The Duplicate will be Photoshop "Default"... About – Red: 30%, Green 60%, Blue 10%

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0 0 0 0 3





#### Target the Color Image, Blue Channel, Select All & Copy...





#### Target the Grayscale Image & Paste.







#### Target the Color Image, Green Channel, Select All & Copy...



0 0 0 0 0



#### Target the Grayscale Image & Paste.



82

6 6 80 0



#### Target the Color Image, Red Channel, Select All & Copy...






#### Target the Grayscale Image & Paste.



In the Grayscale Layered Document, Add Layer Masks...





Layer Masks Added, the Additional Layers are Hidden...







#### Local Adjustments Using Layer Masks...



### I've Even Given You an Action...

### Why Keep the Color Image Open?

### To Provide a Source of Color Based Selections...





#### Using Color Range to Create a Color Based Selection...



#### Use a Selection Tool...



Drag the Selection-then Hold the Shift Key...







Use the Color Based Selection on the Grayscale Mask...



#### The Color Original...



#### The Photoshop "Default"...



#### The Color Channel > B&W Layer Conversion...

## Adding a Color Tone to a B&W Image...





#### Create a Hue / Saturation Adjustment Layer...

Edit:	Master 🛟	)		OK
	Hue:	45		Cancel
	Saturation:	25		Load Save
	Lightness:	0		
			J J J.	Colorize

### Hue/Saturation "Colorize" Option Adjust the Hue...



Edit:	Master 🗘	)	1	ОК
	Hue:	45	]	Cancel
	Saturation:	8	]	Load Save
	Lightness:	0	]	
			J J J_	Colorize

### Adjust the Saturation...





#### Create a **Color Balance** Adjustment Layer...

Posterize ....

Color Balance Color Lev Cyan	els: 0 0	-40 Red	OK Cancel
Vagenta	O	Green	Preview
Tone Balance	O Midtones	Highlights	

## Warming the Highlights...



Color Baland Color Le Cyan — Magenta — Yellow —	vels: 0	0 +	60 Red Green Blue	OK Cancel
<ul> <li>Tone Balance</li> <li>Shadows</li> <li>Preserve Lu</li> </ul>	e O Midtones	s 🔿 Hig	hlights	

### Cooling the Shadows...





#### **Custom Grayscale Conversion**



#### Adding a Colorize Hue / Saturation Adjustment Layer



#### Adjusting the Saturation



#### Color Balance Layer - Adjusting the Highlights Warmer



#### Color Balance Layer - Adjusting the Shadows Cooler

# OK, Now Ya Got a Nice B&W Image....

## Now What?

## COLOR MANAGEMENT!

## **Because in Order** to Print... Color Management is Required.

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	paces -							Load
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	CMYK:	U.S. Web Coate	d (SWOP)	v2		:		
	Gray:	Dot Gain 20%				:		Fewer Options
	Spot:	Dot Gain 20%				•	N	Preview
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	Gray:	Preserve Embed	Ided Profil	les 🐳				
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#### More Options...

### Allows you to selection important parameters...

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Adjusting Gray Gamma... When Working in RGB Gray Setting Should Match Gamma

But Dot Gain When Working in CMYK

	Color Settings	
For more manage Suite ap	re information on color settings, search for "setting up color ment" in Help. This term is searchable from any Creative oplication.	ОК
Settings:	Custom	Carice
- Working S	paces	Load
	RGB: Adobe RGB (1998)	Save
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	Gray: Gray Gamma 2.2	Fewer Opt
	Spot: Dot Gain 20%	Preview
Color Mar	agement Policies	
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	CMYK: Preserve Embedded Profiles	
	Gray: Preserve Embedded Profiles	
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- Advanced	Controls	
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Adjusting Gray Gamma...

Gray Gamma Should Match Your Photoshop RGB Working Space

Adobe RGB = 2.2 ColorMatch RGB = 1.8 ProPhoto RGB = 1.8 sRGB = 2.2
	Color Settings	
For more manager	e information on color settings, search for "setting up color ment" in Help. This term is searchable from any Creative plication.	ОК
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- Working St		Load
inerning of	RGB: Adobe RGB (1998)	Save
	CMYK: U.S. Web Coated (SWOP) v2	
	Gray: Gray Gamma 2.2	Fewer Option
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	Engine: Adobe (ACE)	
	Intent: Relative Colorimetric	
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	Use Dither (8-bit/channel images)	
Advanced     Desatura     Bland BC	Controls te Monitor Colors By: 20 %	
- Description	hePCP: Preparation of contact for common printing conditions in	
North Americ	a. CMYK values are preserved. Profile warnings are enabled.	

Saved Color Settings...

Deselect: Ask When Pasting Ask When Opening: Missing Profiles

It's Useful to Know when an Image doesn't Match.

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

It's Useful to Know when an Image doesn't Match. But, you'll ALWAYS Want to Convert on Paste and Selecting a Profile When Opening is Silly...You Can't See the Image So...How Will You Know it's Correct?

### You'll Need to Properly Use Photoshop CS3's

### Print Dialog

Print	
Printer: StylusPro3800	Color Management
Copies: 1 Page Setup Position Center Image Top: 2 Left: 1875 Unit: Inches 2 Scale to Fit Media Scale to Fit Media Scale: 100% Height: 12.748	<ul> <li>Document (Profile: sRGB IEC61966-2.1)</li> <li>Proof (Profile: N/A)</li> <li>Options</li> <li>Color Handling: Photoshop Manages Colors</li> <li>Did you disable color management in the printer dialog?</li> <li>Printer Profile: Pro38 PLPP</li> <li>Rendering Intent: Relative Colorimetric</li> <li>Black Point Compensation</li> <li>Proof Setup: Working CMYK</li> <li>Simulate Paper Color</li> </ul>
Width: 17.999 Unit: inches Print Resolution: 320 PPI Match Print Colors Show Bounding Box Print Selected Area	Determine Colors

### And Then The Print Driver... In This Case, Epson...

	Print
Printer:	Stylus Pro 4800
Presets:	Standard
	Print Settings
Page Setup:	Standard
	Paper Tray
Media Type:	Premium Luster Photo Paper
Color:	Color
Mode:	Automatic
	OCustom
	Advanced Settings
	Print Quality: SuperPhoto - 2880dpi
	Super MicroWeave
	High Speed
	Finest Detail
? PDF ▼ Pre	view Supplies Cancel Print

#### The "Print Settings"

	Print
Printer:	Stylus Pro 4800
Presets:	Standard
	Printer Color Management
<ul> <li>Color Controls</li> <li>ColorSync</li> <li>Off (No Color Adju</li> </ul>	ustment)

#### The "Printer Color Management" - OFF

## What About **Epson's** UltraChrome K3 **Printers**?

# No Color Management From Photoshop...

Print	
Printer: StylusPro3800 Copies: 1 Page Setup Position Position Center Image Top: 2 Left: 1.875 Unit: inches Scaled Print Size Scale to Fit Media Scale: 100% Height: 12.748	Color Management       Imagement         Print       Imagement         Imagement       Imagement         Imagement </th
Unit: inches  Print Resolution: 320 PPI Match Print Colors Show Bounding Box Print Selected Area Cancel	Done Print

		Print	
Printer:	Stylus Pro 48	00	\$
Presets:	Standard		•
	Print Setting	5	•
Page Setup:	Standard		
	Paper Tray		•
Media Type:	Premium Lus	ter Photo Paper	+
Color:	✓ Color		•
Mode:	Advanced Black	B&W Photo	•
	Diack		
	<ul> <li>Advanced S</li> </ul>	ettings	
	Print Quality:	SuperPhoto - 28	80dpi 🛟
		✓ Super MicroWea	ave
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		Finest Detail	
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#### The "Advanced B&W Photo" Mode

		Print			
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Presets:	Standard		\$		
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Page Setup:	Standard				
	Paper Tray			\$	
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Color:	Advanced B&	W Photo		•	
Mode:	Automatic				
	OCustom				
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#### The "Advanced B&W Photo" Mode

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Printer Color Management Settings for Advanced B&W

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Adjusting the Base Tone Settings - Dark

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#### Adjusting the Color Tone

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#### Adjusting the Color Tone - Warm

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Presets: Standard Printer Color Management Color Toning: Fine Adjustm Color Toning: Darker Tone: Darker Brightness: 0 Contrast: 0 Shadow Tonality: Highlight Tonality:	Printer:	Stylus Pro 4800			
Printer Color Management   Color Toning:   Fine Adjustm   Tone:   Darker   Brightness:   0   Contrast:   0   Contrast:   0   Shadow Tonality:   Highlight Tonality:	Presets:	Standard		;	
V     R     Horizontal     Color Toning:   Fine Adjustm   Tone:   Darker		Printer Color Ma	nagement	•	
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#### Adjusting the Color Tone - Custom Warm

### In Search of...

## the PERFECT B&W Print

### By Jeff Schewe

Additional Notes: schewephoto.com/workshop