

Decisions, Decisions

The Case for Shooting Raw

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Sure, you can stuff a lot more JPEGs than Raw files onto your memory card. And for moderately sized enlargements—say 8x10's—you won't see a huge difference in quality between the two. But what if you want to go larger—much larger? What if you are after the ultimate in quality from your digital images? Well, if your camera can shoot Raw files, you should seriously consider giving it a go.

Raw files are so called because the file contains only the "raw" data captured by the camera's image sensor without any adjustment from the rest of the circuitry. Raw files need processing using special software before they can be viewed or worked on using an image-editing program like Photoshop. The photographer has to do everything the camera would have

done automatically, such as set white balance, apply sharpening, and look after other factors, like contrast and color saturation. This process gives loads of potential for control and, ultimately, offers

What if you want to go *much* larger? Consider giving Raw a shot.

the photographer more creativity. This need for processing and the ability for Raw files to act as the original starting point for an image means they are often referred to as digital negatives.

It's not all rosy though. Raw files have two major drawbacks. [First], they take up more room

on the card than JPEGs, so if you shoot Raw all the time you'll need more storage capacity. [Second], there is no standard, meaning every manufacturer has its own proprietary format. It also doesn't help that Raw file formats can differ from camera to camera within the same brand, as technology is improved. For example, Raw files from Nikon's D70s differ from those output by the new D80, so a software update is required.

Most manufacturers supply free software with their cameras for processing Raw files, although third-party stand-alone Raw file converters are also available: Raw Shooter Essentials (free; www.pixmantec.com) and CaptureOne (LE version \$99; www.phaseone. com) are two well-known

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Two thumbs way up for the EMCC Website redesign!

Many thanks and congratulations to Joel Holcomb for his hard work on the Website's new look. If you haven't stopped by for a visit, you're overdue! Check out www.easternmainecameraclub.org for the latest meeting calendar, the new competition entry form, and up to date scoring information for all competitions held so far this club year. You'll also find a link to this newsletter and the archive.

The Website redesign also features a member image gallery. Both the Website and the newsletter are always looking for fresh images to spotlight the talents of EMCC members. Next month's topic for the *view-finder* gallery will be sunsets. Don't be shy—send us your images!

Happy Holidays, mary@dysarts.com liz.grandmaison@verizon.net

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viewfinder

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Eastern Maine Camera Club was organized in 1977. Current membership stands at more than 50 members of all ages and skill levels. Our mission is to encourage and develop interest in amateur photography. We meet the first and third Thursdays of each month, September through May, at the City of Bangor Parks and Recreation building, 647 Main Street, Bangor. Meetings begin at 7:00 p.m. Contact us through our Website at www.easternmainecameraclub.org.

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packages. [Additionally, Adobe Camera Raw (ACR) is a plug-in that has been bundled with Photoshop since version 7.0 and with Photoshop Elements since version 3.0. See the article on B+W conversions for further discussion of ACR.]

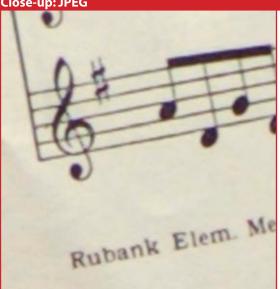
Most cameras that shoot Raw files work in 12-bit mode, giving 4,096 shades of gray per pixel, which equates to over 68 billion colors in total. JPEG files, by comparison, are only 8-bit, offering 16.7 million colors. This is enough for ordinary occasions, but in more challenging conditions it won't take much before you'll notice the greater tonal depth offered by Raw. There's loads more color information available and you've also got the option of processing an image as a 16-bit file for the ultimate in color quality.

So it's not just a JPEG's compression artifacts that make it a runner-up in the image-quality stakes. More colors, sharper details and the ability to recover mistakes in exposure and white balance all make Raw a better bet.

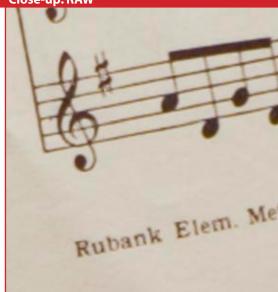
Finally, Raw has one advantage that may materialize in time. Raw is a new technology and as converters improve, as they surely will, you may get even more from the pictures that you took yesterday. Now there's a thought!

To be fair, get the exposure right and there's no doubt that you can get high-quality images by shooting JPEGs. However, the examples below show the subtle differences that can matter when it comes to enlarging. Both files have been enlarged to 20x30 inches at 200 ppi. As you can see, the Raw file reveals slightly more detail and shows much less color "fringing" (the cyan and magenta ghosts around the notes) than the JPEG file.

Close-up: JPEG



Close-up: RAW



A VISIT FROM

Members who came to our meeting on November 2 were treated to a visit by Brunswick photographer and Pulitzer Prize nominee Tom Jones. Tom punctuated his generous critique and commentary with concrete advice and piles of humorous stories from his many years as a professional. Using member images, he showed how to strengthen compositions by "cropping bravely" to emphasize the subject more clearly. Tom stressed the importance of building depth in compositions by using the entire frame and talked about "printing deeper" for tonal richness and depth. He reminded us that regardless of whether we shoot film or digital, "what you do within the space of your format makes you the artist."

gallery







Pumpkin & Zinnia: Claudette Nason



Frosted Leaves: Liz Grandmaison



Shouldn't your work be here? To submit images for our reader gallery, email them to liz.grandmaison@verizon.net.



Part 2: Digital Black-and-White Conversions

Flexibility & Control

Liz Grandmaison

In last month's article, I began our exploration of B+W conversions with an overview of three methods: Grayscale Conversion, Desaturation, and Channel Mixer. As explained, each has its strengths and may produce an optimal result for some images. In tackling B+W conversions, you will need to weigh for yourself the relative importance of speed and efficiency versus fine control. That said, this month's article will give you an overview of progressively more complex conversion methods that offer greater control over your final image.

Raw Conversion

Photographers who shoot Raw files rather than JPEGs can take advantage of the added flexibility offered by Adobe Camera Raw (ACR). ACR is a free plug-in bundled with the latest versions of Photoshop and Photoshop Elements and supports a broad

range of cameras and Raw format. To convert a Raw image to black and white, open it in ACR and first move the Saturation slider all the way to the left in the Adjust tab. From there, move to the Calibrate tab and use the Red, Green and Blue sliders to adjust each channel's saturation the channels' proportions relative to each other. Next, stop in at the Curve tab to make fine adjustments to the shadows, midtones and highlights. Once the image looks right to you, click Open in the main ACR window to bring the image into Photoshop. There you can perform any further corrections, resize, sharpen, etc.

Channel Mixer Revisited

There is a different way to use the Channel Mixer method to fine tune your conversions. This method uses two adjustment layers—Channel Mixer and Hue/ Saturation—working together. In your RGB image, go to the Layers palette, click the adjustment layer icon at the bottom, and select Channel Mixer. At the bottom of the Channel Mixer dialog, check the box next to Monochrome then click OK. Return to the Layers palette and click on the Background layer to activate it again. Click the adjustment layer icon again, but this time select Hue/Saturation. In the resulting dialog, use the Hue slider to make your desired tonal changes.

Channels as Layers

A much more complex method, but one that offers the most control, involves copying the individual RGB channels, pasting them back into the layer stack, and using layer masks to blend specific percentages locally. The results of this method most resemble traditional darkroom dodging and burning—they are both subtle

and superb. The digital imaging masters Jeff Schewe and John Paul Caponigro use this method to stunning effect. Rather than paraphrase (or plagiarize) what JPC has to say on the subject, I recommend downloading his free PDF tutorial. You can find it at his Website, www.johnpaulcaponigro. com, or at Adobe's Website in their whitepapers section: www.adobe. com/digitalimag/ps_pro_primers.html. You can also download JPC's Photoshop action for this technique from the same section of Adobe's site.

I encourage anyone interested in digital imaging to take advantage of as many of John Paul Caponigro's free downloads as your hard drive can hold. One warning: the inevitable result will be a burning desire to take part in one of his workshops!

Holiday Gifts From Your Camera

If your holiday gift list includes someone who basically has everything, here are a few ideas for using your camera and/or image editing skills to take your gifts to the next level.

Framed prints

Let's start with the most obvious. There is bound to be at least one person on your list who says, 'I've always loved your picture of...'
Surprise them this year with a

framed print of their favorite shot, be it Mt. Katahdin or one of the grandkids.

Photo books

Most online photo finishers and some of the locals offer real hard-bound books printed with your own images. The books range in size from "brag book" style minis all the way up to full-blown, leather bound 12x12-inch albums. If the past year included a special

event in your family—graduation, new baby, wedding—this could be the just the way to showcase it.

Restored family photos

For the past three years I have made 12x12-inch scrapbook layouts for my husband's family using old photos collected from his aging relatives. His brothers and parents really look forward to them and I've got gift insurance for years to come! Photoshop is a

huge help here, allowing me to clean up damage and make the scrapbook layouts on my computer. If the thought of starting a layout from scratch is too daunting, there is a vast realm of tools to help. An online search for "digital scrapbooking" will open the door.

Enlarged restorations of single images are also a family favorite, so dig up a few old snapshots and start scanning!

A Photographer's Holiday Wish-List

If you find it difficult to ask friends or relatives to support your habit, here's a list of goodies in various price ranges. Clip it out and leave it lying around, or stick it to the fridge if you're the more direct type!

Lumiquest Soft Screen, \$13

This simple diffuser softens the light from your pop-up flash.

LensPen, starting at \$15

Brush on one end, specially treated soft cleaning tip on the other.

HotHands hand & body warmer packs, \$25/box of 40

Nothing shortens a winter shooting session more quickly than frozen fingers and toes. A most welcome stocking stuffer!

Leatherman Multitool, \$30-\$110

No photographer's bag should be without one!

ExpoDisc, \$80-\$200

Fool-proof white balance filter that pops onto the front of your lens.

Available in six standard sizes.

Lensbaby 3G, \$270

Bring the concept of play back to your photography. Have hours of fun getting dreamy, soft-focus shots with a tack-sharp "sweet spot."

Velvia RVP 135-36, ±\$110/20 rolls

If film is still your capture method of choice, nothing else will do.

Epson Multimedia Storage Viewer, from \$500

Whether it's the P-2000, P-3000, P-4000, or P-5000 their 40-80 GB of storage space and nearly 4-inch LCD screens make these devices a great alternative to a laptop for emptying your media cards when you're away from home.

Photography workshop tuition, \$1,000 and up

Hey, this is a wish list, right? Even a partial payment could be just the incentive you need to sign up for a week or a weekend of photo inspiration. Check out the offerings at theworkshops.com, sfworkshop. com, johnpaulcaponigro.com, nealparent.com and gapweb.com.

Competitions

October 19

Competition Topic: Nature

November 16

Competition Topic: People

December 7

Holiday Party; each member may bring 6-8 travel slides or digital images to share

January 18

Competition Topic: Costumes

February 15

Competition Topic: Seascapes

March 15

Competition Topic: Motion

April 19

Competition Topic: Open

Clip & save this list for reference throughout the year!

December 7: Holiday Party

An opportunity for all of us to relax and socialize before the holiday rush sets in. Along with your favorite tasty dish, bring six to eight travel slides or digital images to share with the group.



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