Los Gatos - Saratoga Camera Club Newsletter

Vol. 30 Issue 3 March 2008

2008 Calendar

March

2 PSA	Yerba Buena Chapter of PSA: Working with Problem Images presented by Barry Haynes
3 Competition:	Color/Nature (slides/digital/prints)
17 Program:	Using My Camera Better Discussion Groups Organizer: Harvey Gold

April

7 Competition	Color/Travel (slides/digital) Color and Monochrome(prints)
13 Field Trip:	Palo Alto Baylands Nest Building At The Rookery hosted by Bernie Weinzimmer
21 Program	Travel Photography presented by Jeffery Luhn

Finally Spring...

Barry Haynes - Working with Problem Images

Sunday, March 2 • 9 am to 5 pm
Las Trampas Room, Hillside Clubhouse, Rossmoor, Walnut Creek, CA

9:00 - 10:45 am	Correcting Problem Images.
11:00 - 12:00 pm	Essential Photoshop Techniques for Photographers
12:00 - 1:00 pm	Lunch
1:00 - 2:45 pm	Image Processing with Bridge (CS2 and CS3)
3:00 - 4:30 pm	More Essential Photoshop Techniques for Photographers Compositing – Bracketed Photos – Taking and Combining Images for Panoramas
4:30 - 5:00 pm	Questions and Answers, Book Signing

For more info and registation form:
http://home.comcast.net/~lgscc/BarryHaynesFlyer1.pdf

Using My Camera Better

Program March 17, 2008
Organized by Harvey Gold

Description

The objective of this evening is to allow members to meet with peers to exchange information and tips about getting the most out of their cameras. It is also an opportunity to learn about cameras and equipment that you are considering purchasing.

Remember

Bring your **cameras, lenses and manuals** to the meeting. Prepare questions you have about your equipment.

Procedure

We will break out into user groups each with a facilitator. The facilitator will make sure each member of the group gets a chance to express concerns and/or contribute to the possible solution of other group member's concerns.

User Discussion Groups & Facilitators

Nikon SLR - Facilitator - Joseph Grappa
Canon SLR - Facilitator - Richard Casserley
Point & Shoot - Facilitator - Dick Stuart
Film Shooters - Facilitator - Airdrie Kincaid

The Digital Notebook: Histograms (1.1)[1]

by Fred Drury

The intent of this column is to focus on the important issues that digital shooters need to be concerned about both in the field and as they edit their images back at home. This column takes a detailed look at how you should be using your cameras display features to optimize your images. In the next issue we'll take a look at file formats for digital images. Longer term we'll address how we think you should optimize your images in Photoshop and describe what we think are some of the key components of a digital workflow. But today, let's start by concentrating on the best possible use of the tools that came included with your camera!

I doubt many of us could have foreseen the speed at which digital photography has overtaken and surpassed fi lm in popularity. It does offer advantages over fi lm. As someone who is primarily an underwater photographer the ability to make more than 36 exposures is especially important. You can't change fi lm underwater and, as we all know, the best subjects invariably show up after the end of the roll. Another advantage is the availability of the histogram, which enables one to immediately evaluate image exposure. Perhaps the most important tool a nature photographer has is an alarm clock. For a digital photographer the second most important tool should be their camera's Histogram and Highlight Warning displays. Used properly, they will eliminate most exposure errors.

Figure 1 shows a normal histogram. A histogram is simply a bar chart showing all of the individual pixel values recorded by the camera's sensor. It ignores color and compares only brightness, or more correctly, luminance. Vertical lines included in *Figure 1*, help one to distinguish five regions, commonly known as 'shadows' on the left, then 'quarter-tones', 'midtones' (in the center), next 'threequarter- tones', and fi nally 'highlights' on the right… each of these zones roughly equal to the typical fi ve stop range on a digital SLR (or slide fi lm). The height of the histogram at any location is a measure of the number of pixels having that luminance… the higher the graph, them more pixels having that value. Examining the histogram can tell you a lot about the image. The image that produced *Figure 1.1* had no real blacks, but otherwise good shadow detail. Its tonality was distributed over all fi ve zones. Notice that there were no pixels at the extreme ends of the exposure range… no blacks and no whites. *Figure 1* is a good histogram.

Compare this with *Figure 2* where much of its tonality is crowded up against the right hand side of the histogram; you can infer that some is actually beyond the edge of the display! This is an example of a severely overexposed image… so overexposed that we have lost highlight detail… or we can say '**the highlights have been clipped**'. They're beyond the range of the camera.

Similarly, *Figure 3* shows an example of '**shadow clipping'**; values have been clipped beyond the left edge of the display. Exposure is all about eliminating, or at the very least, controlling clipping. It may help to think of the histogram layout like the goal posts on a football field. A field goal kicker's

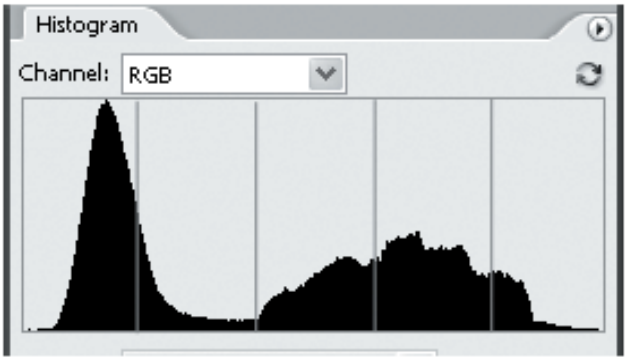

Figure 1

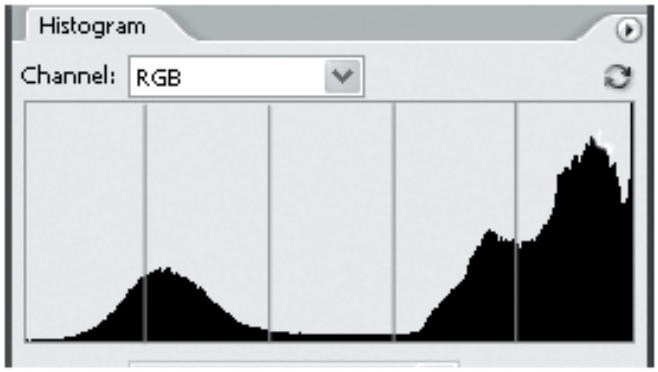

Figure 2

[1]Reprinted from the Fall 2007 issue of the Bulletin of the New England Camera Club Council, Inc.

objective is to put the ball between the goal posts. A photographer's objective is to expose the image so that all the tonality is between the uprights… between the extreme left edge and right edge of the display. Just as the kicker works to get the ball between the uprights so, too, the photographer adjusts shutter speed and/or aperture to contain the histogram within the uprights.

Most digital cameras provide a Histogram display which can be accessed after an image is made, or better yet, can be setup to be automatically displayed immediately after the image is made. The photographer can then examine the Histogram and determine whether clipping has occurred and if necessary make adjustments to the camera's control and reshoot the image.

Figure 4 is the same image as *Figure 3*… I simply increased the shutter speed one stop, from 1/30 sec. to 1/15 sec. Some cameras include a preferable three-channel (RGB) Histogram which lets one more critically examine the image of evidence of clipping in individual channels. Ideally we seek exposure settings which produce no clipping. However, when the scene has greater exposure latitude than the camera can handle, we either postpone the shot for less 'contrasty' light, or permit some clipping of the shadows. A viewer's eyes will not accept highlight clipping but will accept some shadow clipping, so highlight clipping is considered more critical than shadow clipping.. Accordingly, most digital cameras also have what is called a **Highlight Warning**. When this feature is 'on', the image will be displayed with blinking regions where highlights were clipped. '**Blinkies**' indicate that camera adjustments need to be made and the image re-shot.

If you're shooting digital you should be checking the Histogram and looking for 'blinkies' on most every exposure. If you're not doing this, it's time to get out your camera manual and find out how to set

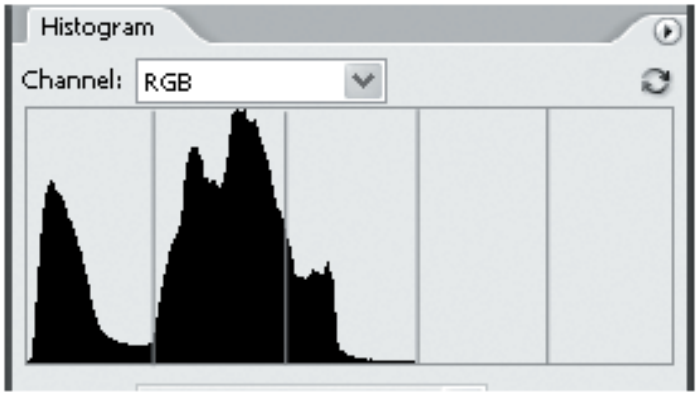

Figure 3

the display up so that both are provided immediately after each exposure. And, if your camera will provide individual histograms for each or the RGB channels, it's a better alternative and take advantage of it! In the next issue of the NECCC Bulletin we'll address the JPEG vs RAW debate… which should not be considered a debate at all, because each has its place. Which you choose depends upon the purpose of your photography.

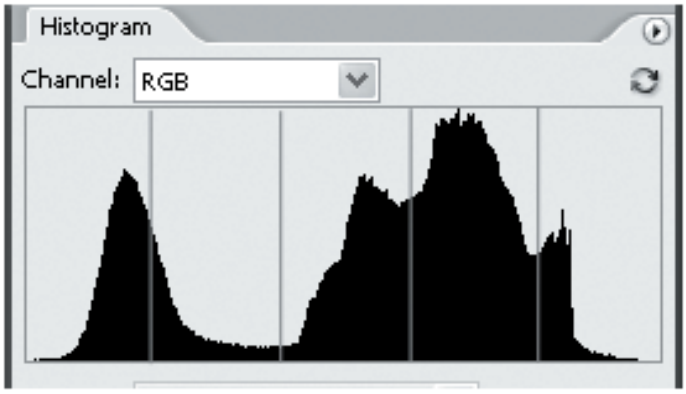

Figure 4

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The official publication of the Los Gatos-Saratoga Camera Club. Meetings : first and third Mondays, 7:30PM at the Elks Club, No 1857 of Los Gatos, 105 Newell Ave. (At Winchester near Lark). Member of the Photographic Society of America.