



# *Santa Ynez Valley*

## *Camera Club*

Digital Stuff by Frank Swanson

### **Important Factors for Capturing Good Pictures**

First, I would like to expand on something I mentioned last night. The goodness or badness of a picture will be determined by a number of factors. For a digital image, the most important factors can be ranked as follows:

- The photographer's skills. If the digital image is poorly composed, out of focus, or simply does not capture what the photographer intended no amount of rescue effort will turn it into a prize winning picture.
- The lens. Quite simply, the lens is the camera's eyes and, if the lens produces blurred images, out of focus results, color aberrations or inconsistent sharpness then those results are what the camera will see and record.
- The camera. The camera is a sophisticated device which merely provides a convenient way of recording the actions of the photographer and, as a result, what the lens sees. The camera allows latitude in terms of resolution, image size, shooting speed, in-camera processing and a host of other parameters but cannot produce a good result if the photographer does a poor job or the lens is not adequate for the task.
- Post-capture processing. There are several options in this area. One is to allow the camera to control the post-capture processing by shooting in the JPEG mode. Almost all current digital cameras do a good job in this area and, for most casual camera users, this is quite adequate. For serious amateurs and professionals shooting in the RAW mode offers more control and potentially much better images. Images shot in the RAW mode do not undergo any in-camera processing and thus must be "developed" using software such as Adobe Photoshop. The skill of the photographer is once again put to

the test in this area and, assuming that the image has potential, an excellent photograph can be the end result.

- Printing and displaying. A good photograph is only a good photograph until it is prepared for display. Taking care during the printing, matting and preparation for display can result in a good photograph showing as a great picture which, in the end, is one of the objectives that we are striving for.

## **How I Sharpen Images**

As noted last night, there are probably as many ways to sharpen a digital image as there are ways to capture it in the first place. As Shawn noted, the term sharpening is a misnomer. The sharpening process will not rescue a blurred, out of focus or badly composed image. It will however provide greater contrast in an image edges and boundaries resulting in an apparently sharper and more esthetically pleasing printed picture.

It also should be noted that the sharpening approach that I use will not be appropriate for everyone else. This is true for a couple of reasons. First, I shoot in the camera RAW mode which means that there is no in-camera sharpening of the resulting image. If you are shooting in JPEG, there will be sharpening applied to the image by the camera. As a result, the sharpening that I perform on my RAW images will be greater than that required by a JPEG image. JPEG images may still need some sharpening but not as much as a RAW image. Second, I shoot images with the end objective of printing them and displaying them as relatively large matted and framed pictures. Printed images, particularly large ones, require more sharpening than pictures that will be displayed on a computer screen or used to generate smaller snapshots.

With these caveats in mind, I use a two step process for sharpening my images. The sharpening process is always done after all other image tweaking (levels, exposure, shadows, brightness, color corrections etc.) but before straightening, cropping or resizing. Normally I sharpen all candidate images after converting the RAW image to a “developed” TIFF file and before saving to a folder. Both sharpening steps have been set up as Photoshop Actions which I will also discuss and explain how to use.

Step one is a sharpening algorithm developed by Fred Miranda and discussed on his web site at <http://www.fredmiranda.com>. The version

currently available is Intellisharpen II plugin which is a revision from the one I am using. Both versions offer edge, luminance and mode sharpening in addition to other options for control of the resulting image. A big advantage of either version is that control of the amount of sharpening is adjustable within the application and, as a final step, it provides a review and tweak option that allows fine tuning of the finished image. All of this is done in layers so the original image is not affected by the sharpening until accepted by the photographer. The original version of Intellisharpen was under Automate (File > Automate) and was activated from that location. I suspect the version II follows that same procedure. Intellisharpen II is available as a download for \$24.00 from the Fred Miranda web site.

Step two is what Michael Reichmann calls Local Contrast Enhancement and he describes the process and results in his web site at <http://www.luminous-landscape.com/tutorials/contrast-enhancement.shtml>. The approach uses three simple Photoshop Unsharp Mask (USM) settings as follows:

- Amount – 20%
- Radius – 50
- Threshold – 0

If you use the Intellisharpen II as step one, then the Local Contrast Enhancement settings can be the defaults for USM (Filter > Sharpen > Unsharp Mask). Michael Reichmann suggests evaluating different settings for Radius and Amount to select an appropriate amount to use for each photographer's requirements. The settings suggested above result in a noticeable effect and (for me) yield sharp prints with nice contrast. I should note that I rarely change the contrast settings of any image in Photoshop.

### **Photoshop Actions**

Both of the above sharpening tools can be established as Actions which allow the procedure to be initiated by tapping a Function key. An Action is a series of commands that you play back on a single file or a batch of files. Most commands and tool operations such as sharpening with Intellisharpen II and Local Contrast Enhancement are recordable in actions. It should be noted that if you use an Action to perform Intellisharpen II you will lose some of the individual settings on an image by image basis. Setting an Action does not preclude performing either Intellisharpen II from File > Automate or Local Contrast Enhancement from Filter > Sharpen > Unsharp Mask as desired.

When you create a new action, the commands and tools you use are added to the action until you stop recording.

To create a new action:

- Open a file.
- In the Actions palette, click the Create New Action button, or choose Create New Action from the palette menu.
- Enter a name for the action.
- Choose a set from the pop-up menu.
- If desired, set one or both of the following options:
  - Assign a keyboard shortcut to the action. You can choose any combination of a Function key, the Ctrl key (Windows) or Command key (Mac OS), and the Shift key (for example, Ctrl+Shift+F3). I use F9 for Intellisharpen and F11 for Local Contrast Enhancement.
  - Assign a color for display in Button Mode.
- Click Record. The Record button in the Actions palette turns red.
- Choose the commands, and perform the operations you want to record (run Intellisharpen II or Local Contrast Enhancement).
- To stop recording, click the Stop button, choose Stop Recording from the Actions palette menu, or press the Escape key. To resume recording in the same action, choose Start Recording from the Actions palette menu.

### **One Final Requirement for Good Pictures**

Have a helpful and affectionate cat. Paw prints and cat hairs are essential ingredients to assuring peace of mind during the processing of digital images.

August 12, 2004