



MARCH 2004

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OK, this is an abbreviated issue. No feature articles, I'm afraid. Simply ran out of time!

Unfortunately, that means the twice-delayed articles on making selections will be held over until next month. They are written, but there was not time to do the illustrations and layout. What can I say? I actually did some photography instead!

But all the feature articles are here: the DIPSIG Page, including Jerry Dupree's report on the last meeting; Tip Of The Month, showing you how to insert stock clouds into an otherwise cloudless sky; Love Me. Love My Dig, where Stuart Lynn comes clean on the lowdown on his new Canon Digital Rebel; Woody's Corner with yet more bargains and tidbits; and Dear e-bby, answering all your questions.

And a brief column from Stuart on why he has switched to RAW mode whenever he can.

– Ed

the dipsig page



by Joe Ramsey

DIPSIG is the Digital Photography Special Interest Group of the Coachella Valley Desert Camera Club. It meets the third Tuesday of each month (except July and August) at 6.30 pm at the Courtyard Marriott at the corner of Cook and Frank Sinatra in Palm Desert

Tuesday, March 16 DIPSIG Meeting: The Lowdown on Photoshop CS!

Photoshop just keeps marching along. The changes are frequent but the latest version, Photoshop CS (version 8.0), has numerous new features that make photographers' lives a whole lot easier. Since we now have several members who are using this latest upgrade while others may be hesitant to move up the time seems appropriate for a review of several of the more useful new applications and improvements to previous functions.

The good, the bad, and the ugly:

First up Jerry Dupree will demonstrate the use of the new Shadow/Highlight filter. You will be amazed by the results that can be achieved using this filter. Then adding to the fun Jerry will show us the new Filter Gallery with its humungous Preview window. Now you can stack up filter effects and view the results and even modify or rearrange the order of application before applying them.

As you know the File Browser function is incorporated in both Photoshop Elements and Photoshop 7.0. But did you know that numerous functions have been added to the File Browser in Photoshop CS that give it greatly improved functionality? Watch as Stuart Lynn shows us some of these new functions.

In addition, Stuart, famous for his background blurring techniques to achieve depth-of-field, will demonstrate how to accomplish that same depth-of-field effect using the new Lens Blur filter with all of its controls related to the camera lens focal length and iris configuration, i.e., shape, curvature and rotation and adjustments to specular highlights and noise levels in the blurred areas.

Photoshop CS now has a large assortment of functions that can be used with images in 16-bit mode. So what, you ask! Most of us have been processing images in 8-bit mode and found only a few basic adjustments that could be used in PS 7.0. PS Elements users have no choice. Your prints look fine you say. Well, we say maybe not as good as they could. There are advantages to using 16-bit mode. Listen and learn as Stuart explains the benefits and limitations of processing 16-bit images.

And more: making your own business/calling cards using Photoshop:

Some of you probably have Greeting Card Mania or some such program that among other things allows you to make your own business cards. You don't need specialized programs if you have Photoshop (any version). The neat thing about

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making your own cards is that you can print as few or as many as you want. Make them all the same or each with a different layout. You don't need to order 500 or 1000 at a time and pay exorbitant prices to get a card that projects your image, no pun intended, as you would like it.

First we need a Layout File where paper size, prints sizes and locations are specified. Enter Photoshop CS. That's right, another improved application. This time it's the Picture Package function which we have discussed in the past. However, this new version makes it really simple to combine various sizes of prints on a single page and avoids the tedious task of having to write the Layouts File Photoshop does the writing for you from an easy to use Layout Edit Window. I have used it extensively and will show you some of the files that I have made that otherwise would be a major pain.

For our practice project we won't make you write a Layout File from scratch but instead we will have CD's with the Business Card Layout File ready to copy to your computer. We'll help you install the file by showing you how and where it belongs and then you will be ready to design some great cards. If you prefer to prepare some personalized cards before the meeting make the image size 2 in x 3.5 ins. That is a very common standard business card size and is the size used in our Business Card Layout File which will accommodate 10 cards. Put in type layers and photos or whatever you like.

Be sure to bring your laptops with a photo or two you can use for this fun session making your own business/calling cards.

It's not required, but you will get more out of the meeting if you are able to bring laptops and power cords!

Report on the February DIPSIG

Stuart Lynn gave a presentation on how to create a collage with Photoshop using layers to contain each piece of the collage. It is possible to create an image with Photoshop or Photoshop Elements containing for practical purposes any number of layers, allowing for the construction of complex collages. A collage is an image made up of components of photographs or other digital images, analogous to the use in other art forms of paper, cloth, wood, or other media. It can contain parts of images, whether photographic or computer-generated, and can employ a variety of computer generated effects.

The tools of Photoshop or Photoshop Elements allow for almost endless variety through the use of feathering, opacity, masks, blends, colors, blurring, or filters – or of layer effects and the use of text.



Collages can alter reality, create new environments, or enhance and improve a scene. Don't like the sky? Change skies, add clouds, give it a beautiful sunset.

Anyone interested in seeing some very interesting Photoshop art work and collage is invited to look at The Photoshop Guru's Handbook at <http://www.photoshopgurus.info>.

Participants at the meeting also had some hands-on practice on making collages following the guidance of Joe Ramsey.

There was also a round-table discussion on various issues of digital photography.

TIP OF THE MONTH: *No More Cloudless Skies!*

Your beautiful landscape image is lacking only one vital feature: clouds.

In the prehistoric days of darkrooms (yes, some of us remember what they were!), photographers routinely added clouds to their cloudless skies. They maintained a stock of super cloud negatives just for the purpose, and overprinted one of them onto a cloudless landscape, protecting the already exposed foreground with a mask.

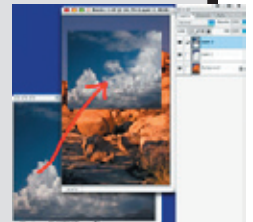


Well, guess what! You can do the same thing in Photoshop or Photoshop Elements!

Just open your cloudless landscape. Let's call it the "target" image. Make your best possible selection of the sky (see next month's *e-focus*) – equivalent to making a mask in the darkroom. Copy the selection to another layer (*Ctl/Cmd-j* in Photoshop; *Copy* and *Paste* in Photoshop Elements).

Now open your separate image of a stormy sky (which may be part of another landscape). Let's call it the "source" image. It's a good idea to make sure that both images are about of the same resolution.

Select the rectangular *Marquis* tool (shortcut: type the character "m"). Use it to make a rectangular selection of the clouds in the sky of the source image (don't worry if it also includes some other stuff). Switch to your *Move* tool ("v"), and drag your selection across to the target image, making sure you don't release your mouse button until the selection is well over the target image. Note that it places the selection on a new layer in your target image above your "sky" layer.



Transform (*Ctl/Cmd-t*) your selection by scaling it until it well covers the sky in the target image. Leave yourself considerable leeway. It's OK if it covers part of the foreground.

Now click *Ctl/Cmd-g* which is a shortcut for **Layer**>*Group With Previous*. Magically, your clouds are "tucked" in to your selection of the sky layer, so they no longer overlap the foreground! And using your *Move* tool ("v"), you can move the clouds around until they are positioned exactly where you want them. That's why you left some leeway when you scaled the clouds in the previous paragraph.

When you have positioned the clouds to your satisfaction, you can "fix" them once and for all. Making the top layer selected, just invoke *Merge Down* of your *Layers* palette (or **Layers**>*Merge*

Now isn't that easier than peering through the red light gloom of the darkroom, your lungs filled with the



your satisfaction, you sure the top "cloud" from the pulldown menu at the top right *Down*, or *Ctl/Cmd-e*.

through the red light gloom of the smell of invasive chemicals?

Canon DigiRebel: Love at First Click!

by Stuart Lynn

The Canon Digital Rebel (EOS 300-D) has been named the “Camera of the Year” by several writers. I now know why.

Two months ago I sold my Nikon Coolpix 5700 (a worthy camera in its class) and purchased my Rebel. I wanted to move away from an all-in-one (“point and shoot” is too derogatory a term

LOVE ME...

for a camera with as many options and functions as

the 5700) back to an SLR, and I already possessed several Canon lenses. Not only did I want the flexibility and range of interchangeable lenses, but I also yearned for:

- A real, through the lens viewfinder, instead of the electronic viewfinders prevalent in 5700-class cameras. I wanted to be able to really see what I was shooting, including the effects of adding filters, with no adulteration. And I needed a larger view area – my “mature” eyes have a hard time squinting at small viewfinders.
- No shutter delay. Not just when shooting jpegs, but also when shooting in RAW mode. I have become convinced that RAW shooting is a must for high quality work.
- Real manual focusing, including access to a distance scale on the lens. Manual focusing is helpful for much landscape work and vital for macro photography. Although my Nikon came with manual focusing, it was very clumsy to use and did not allow for sensitive, spot-on focusing. And there was no scale.
- Access to quality “glass” without many of the distortions that come with “all-in-one” cameras that compromise quality for the ability to stretch the zoom factor as far as possible. My Nikon, for example, suffered

from excessive “keystoning” at wide angle settings. Its lens was excellent for the price, but could only go so far.

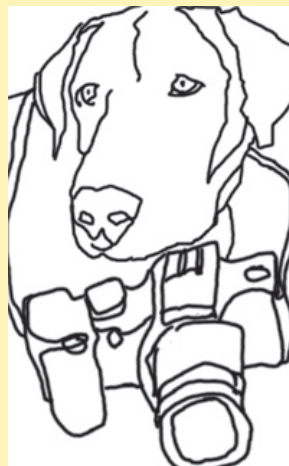
- The ability to stop *way* down to achieve maximum depth-of-field.



The DigiRebel has delivered on all fronts! From the first click, I knew this was the camera within my price range that I needed. And it delivers 6.3 megapixels!

OK, it lacks some of the features of its upscale Canon EOS-1 D brethren. For example, it has no built-in spot metering capability. But I don’t miss that in a digital world of post correction – bracketing is good

enough for me (and I can always buy a separate spot meter if necessary, that would



LOVE MY DIG...

be more flexible than a built-in). And it “only” shoots 2.5

frames per second with a 4 frame burst – but I am not an action or wildlife photographer where more fps is a must.

But it does take all Canon lenses on the current market. It even comes (as a low cost optional extra) with its own 28-80mm equivalent lens specially designed for the Rebel that costs less than \$100. There is essentially no shutter delay, or delay between shots. It has the fastest autofocus in anything near its price range, and is very flexible in its autofocus settings. Yet, manual focusing is a cinch – and very precise. And it stops down to $f/36$! It’s shutter speeds are not shabby either, ranging from 30 seconds to $1/4000^{\text{th}}$ of a second – plus *bulb*.

It's viewfinder is much larger than the 5700. Not as large as a true 35mm because of the smaller area of the recording chip, but larger than the electronic viewfinders. Speaking of the chip: it's actually CMOS, not CCD, which means much less shadow noise than other cameras in its price range, particularly at higher ISO settings.

And, for a digital SLR, it's incredibly light, because (like its film namesake) much of it is made out of plastic. So buy a chest strap and don't let the Reb bash against the rocks. Lightweight is a must for me these days!

What does it lack (for me). Well, it is not sensitive to infra-red light like my old Nikon, and I was just wanting to experiment in that arena. And it does not have a swivel LCD viewer so it's harder to take photos of my own navel! In fact, its LCD array is only for post review, not for framing your composition – but that's no loss for me. I dislike LCD viewers.

Nikon is coming out with a "competitor", since Canon is eating its lunch in this digital price bracket. It will probably trump Canon in certain areas, but by all accounts its bottom line will be more expensive than the Rebel, particularly since it will not come with its own custom workhorse lens. But it will surely appeal to old Nikon users who already have a stable of Nikon lenses, for the same reason that the Canon DigiRebel appealed to me.

Price of the DigiRebel? \$770 - \$1,000 or so, including the optional lens. The lower end is probably grey market.

(Footnotes)

¹ Megapixels is a poor measure of quality on its own; other factors are just as if not more important than megapixels. And remember that an 8 megapixel camera is not twice as sharp as a 4 megapixel camera: it is only about 45% sharper, since sharpness increases with the *square root* of the number of megapixels.

The RAW Facts by Stuart Lynn

During the field day at last weekend's Macro Workshop, I shot entirely in RAW mode. This is the first time I have avoided jpegs for an entire shoot. Why?

First, what is the RAW format? It is the normal, unadulterated form of image received by your digital camera. It is a 16-bit image that exploits the full resolution of the sensor. In compressing to an 8-bit jpeg image, the camera's computer throws away much of the information, which is why jpeg is known as "lossy" compression. The 8-bit compressed image also loses much subtle color information.

But the camera's computer also interprets many of the camera's settings when using anything but RAW formats, such as calculating automatic white balance. It may also perform some tricks unknown to you – such as automatic sharpening that can induce halos around edges. The results are not bad, but they distort the original image and the results may be subtly fuzzier and less colorful. This can show in larger enlargements.

I want to avoid these distortions. I want to make my own decisions about white balance, sharpening, and so forth. Fortunately, the new Photoshop CS supports essentially full 16-bit images. It also includes a RAW format viewer that allows you to pre-process your RAW format images and adjust the settings for white balance, sharpening and so forth – in effect, you are becoming your own digital camera.

The 1gb Microdrive that I use for recording images can hold about 190 RAW images or about 400 large jpegs. I can live with 190 images! And my Canon Digital Rebel processes RAW format very rapidly (see this issue, "[Love Me. Love My DIG](#)"). Unfortunately, many lower end digital cameras either do not handle RAW format, or process them slowly causing delays – but do consider switching to RAW where time between shots is less important, such as for landscapes. Files are larger but, hey, storage is cheap!

I can tell the difference. More detail, sharper images, beautiful color!

Woody's Corner by Woody Kaplan

AROUND THE e-BLOCK

Stunning pictures of mars:

<http://earthobservatory.nasa.gov/>

Want to store one month of MPEG-2 video on a single hard drive? Try this unprecedented 1 terabyte capacity drive from LaCie. Not into video? You might just have enough room for 100,000 TIFF images and then some – such as might happen after you collate one of your images per the talks that Stuart and Joe gave at DIPSIG!

<http://www.lacie.com/products/product.htm?id=10118>

Want some helpful tips on taking great pictures? Try this link from Kodak.....

http://www.kodak.com/eknec/PageQuerier.jhtml?pq-path=38/490/336/414&pq-locale=en_US&REFERRER_NAME=emailafriend

How do you store all your pictures?

http://www.kodak.com/eknec/PageQuerier.jhtml?pq-path=38/48/49/437/439&pq-locale=en_US&REFERRER_NAME=emailafriend

Printing, Sharing, and Storing. Good tip from Fujifilm:

http://pictures.fujifilm.com/photo_tips/pt_detail.cfm?id=24

First Sony, now comes Nikon with 8 megapixel which will produce 23MB file for prints 20X30:

<http://www.nikonusa.com/template.php?cat=1&grp=2&%20productNr=25515>

“Not everybody trusts paintings but people believe photographs.”
-Ansel Adams

“You don't take a photograph, you make it.”
-Ansel Adams

“There are always two people in every picture: the photographer and the viewer.”
-Ansel Adams



Woody's Corner Continued On Next Page

Looking for low prices on blank DVD's? Do you think 63¢ each is good price? Check out this company on the web, all you need to do is put together an order for 1000. LOL! Another way for low price is to check Sunday ads for OfficeMax or other "big box" stores. Recently I picked up 50 1X DVD-R for \$9.95 after rebates, 20¢ each! But "caveat emptor" when it comes to quality!

<http://www.shop4tech.com/>

Something new is always coming out, that's why it's so much fun going digital. If your tired of taking your laptop with you on trips to download pictures so you can re-use memory cards, EPSON and NIKON both have new toys for us. Smaller then a PDA with a 30gb hard drive and viewing screen for Nikon, you must check this out:

<http://www.dpreview.com/news/0401/04012802nikoncoolwalker.asp>

Think HP has the market sewn up with their little portable printers that produce 4X6 picture? Think again. This summer EPSON will introduce "Personal Printer Lab" Only \$199 list plus \$29 for ink cartridge with 100 4X6 glossy sheets. Neat "flash picture" on Epson web site. Even has handle to carry around and no computer is needed.

<http://www.epson.com/cgi-bin/Store/PictureMate/pmindex.jsp>

Be one of the first to check out new NIKON D70, coming this month. SLR for less then \$1000 (body only) Could very well give Canon Rebel a run for their money (but you also get a lens from Canon for less money), especially if you have Nikon lenses from the old days. Word is also going around that Nikon is about to stop production of all film cameras. Take your time with this review, 9 pages with pictures of new goodies.

<http://www.dpreview.com/articles/nikond70/page9.asp>

Seems like my first love, OLYMPUS, is also on the move. Set for introduction in April comes the C-8080 Wide Zoom. 8megapixel with 5X zoom lens. Camera companies are finally getting the message also on speed, lag time of just 0.3 sec. Auto bracketing settings in any jpeg mode with a fast 1.6 frames (each with 8 million pixels) shot per sec. Don't get to dizzy with all this new speed, I'm sure others will follow with 9,10, 20 megapixels and 10 times faster. But do you really want to wait?

<http://www.dpreview.com/news/0402/04021215olyc8080wz.asp>

Woody



Your questions answered! e-focus has assembled a team of international inexperts to help you with your digital problems. Please send your questions to e-focus@cvdcc.org.

Dear e-bby: Someone told me the memory stick or card on my digital camera should be reformatted each time it is used and emptied. Can you confirm whether this is a good idea or not? Jerry.

As far as your computer or camera are concerned, your memory card is nothing more than a regular disk drive, just like an external hard drive or a CD-RW. You need to ensure that there is enough free space to capture your new images. You can manage this either by (a) deleting old unwanted images from your camera, which is slow; (b) deleting images singly or en masse from your computer, just like you would delete files on any disk drive; or (c) reformatting the card either in your computer or in the camera. Since most cameras use their own formats for subfolders, the latter is a better idea, and you should clean house occasionally. But don't feel compelled to do it every time if you prefer to manage the space manually, as in (a) or (b).

Dear e-bby: What filters should I get for my new camera? Cheers, Stan.

The workhorse of all filters is a good quality polarizing filter. My second choice would be a neutral density filter to shade bright skies and heighten the foreground, particularly in the early morning or late evening. My third choice would be a set of warming filters (81A, B and C) although these are less important in the post-correction milieu of digital processing. Many advise permanently sticking a clear UV filter in front of your lens to protect the glass, but others argue this is an unnecessary addition with the potential of creating

more image distortion, particularly if cheaper UV filters are used. Highest quality filters should be used to avoid distortions such as chromatic aberrations. And see the next question.

Dear e-bby: Occasionally an image taken with my Nikon 4500 has grey or black arcs in the corners. What gives? It even happens when I have no UV or other filter screwed onto my lens.

Yours, Bill.

This is probably a case of vignetting that normally occurs when something such as a filter is screwed on in front of the lens, and the zoom is set to its widest angle. The edges of the filter block the light rays at wide angle settings, creating a ring effect, particularly at the corners. Manufacturers of digital cameras are trying to squeeze as much zoom as they can out of their lenses, so that vignetting can occur even with only one filter screwed on, even if they say that the camera is designed for filters. It is a design defect if it is occurring with no filter screwed on, and you should contact the manufacturer.

Dear e-bby: What does "TTL" mean in connection with flash units? I know it stands for "Through The Lens", but what is it telling the camera or vice-versa? Does it set intensity? Exposure? Jerry.

In the old days, correct exposures for flash were calculated manually taking into account the power of the flash unit (Guide Number), the speed of the film, and the aperture being used. This was time consuming and subject to error. TTL (first introduced by Nikon in 1980) automates the entire process. The flash unit sends a beam of light that bounces off the subject back through the camera's lens aperture onto the film or digital sensor. A sensor inside the camera measures light that bounces off the film. When sufficient light has accumulated, the TTL computer shuts off the flash unit. Thus the exposure is correctly calculated as seen by the film or digital sensor, but it is the duration of the flash that is being calculated. Among many advantages is that the camera's actual exposure can be set to record ambient light, such as coming from the background; the flash duration is set for the actual subject being illuminated by the flash. This is one reason, for example, why automatic fill-in flash works so well.

TTL has truly revolutionized flash photography, and made flash such a valuable light source.

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(contact efocus@cvdccc.org)



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IN FOCUS, THE NEWSLETTER
OF THE COACHELLA VALLEY DESERT CAMERA CLUB**

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