

Digital Means -

“Unlimited Creativity”

by Les Saucier

What would you wish for if you were mysteriously visited by the Photo Genie? “You have three wishes, choose wisely,” says the genie. As a close-up photographer, I know exactly what I would wish for - more depth of field (DOF) for the subject, less DOF for the background, and NO WIND or “Unlimited Creativity.” The analog image of the crab spider behind the title is an example of the old way of dealing with limited DOF - focus on the eyes and hope for the best for all the other parts. Well no more just hoping for the best, I have been visited by the “Digital” Photo Genie and I have been granted my three wishes.

I have been shooting digital since 1998. I started with a couple of digital point and shoot cameras and graduated to full time digital with a digital SLR in 2000. The learning curve was a little steep but it was well worth it. For me photography is fun again. Digital for me means new toys, new ideas, new ways of seeing, and new ways to express how I see the world. It means that my photography and creative vision are not limited by 100 year old technology.

Wish 1



One of these new ways of creating images is what I call “Stack and Blend.” You take several images, stack them together as layers in Photoshop, and blend only the parts that you want. For example in photo 1, you see an image of in focus purple cone flower on the right and it’s out of focus buddy on the left and in photo 2 you see the opposite. This is your typical analog shot, never enough DOF when you need it. With digital you have another option - stack and blend photos 1 and 2 together for photo 3. Wish number one is granted, unlimited DOF.



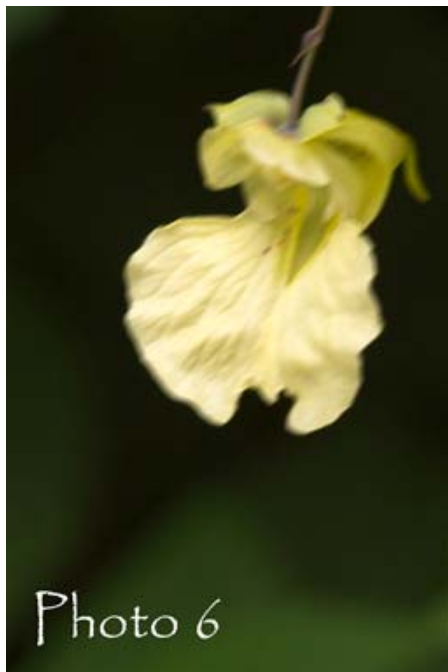
Wish 2



Another problem in close-up photography is cluttered background or too much DOF on the background. Photo 4 was photographed at f22 to ensure that the subject would be in focus. But in my opinion, the background in this photo distracts from the subject. I photographed this black-eyed susan again six times at f4, each time at a different focal plane until I had covered the entire flower. I then stacked the six images and blended the focused parts to produce photo 5. With digital, you control where and how much DOF.



Wish 3



Too windy to shoot close-ups (like the jewelweed image in Photo 6)- this is no problem with digital. Photo 7 is three images at three different focal planes, photographed at 1/200 of a second to stop the wind, stacked and blended together. If you have ever tried to photograph jewelweed you know that they will dance around in the slightest breeze or just the heat from your body. I usually leave jewelweed alone except on the calmest of days. Not anymore with digital; I am in control of the wind. Now, I am only limited by my own creativity.



OH NO, Digital Voodoo!!

Before you cry “digital voodoo, this is not reality,” I used a similar technique to photograph boll weevils and other insects when I was a bio-photographer for the USDA-Agriculture Research Service in the 1980’s and early 1990’s. Then it was very hard work, time consuming, and the equipment to accomplish it was very expensive. Today with digital, it is very easy and a lot more fun. It is not about reality, it is about not putting limits on your creative vision. Now with digital you are only limited by your imagination not your equipment.

Stack and Blend recipe:

Set up your tripod and photograph a subject with a shallow or medium depth of field only focusing on the front part of the subject. Shoot another image focusing on just the middle part. Now shoot again focused on the rear part of the subject. Experiment with different subjects and f-stops until you get a feel for what is needed for your situation.

Open Photoshop (Photoshop Elements users see note at bottom). Place all the images onscreen at the same time. Select the second image in your sequence of photographs and press CTRL-A to select the whole thing. (Mac users will use Command instead of Control.) Press CTRL-C to copy it. Close that photo, as you no longer need it.

Select the first image in the sequence and press CTRL-V to paste or “stack” the second image onto the first. Use Layer / Add Layer Mask / Hide All. Now select the Paintbrush Tool and choose a medium brush. Press the letter “D” on your keyboard to insure you are painting with the color white. Start painting over the out of focus part of the image. You are removing the out of focus layer and revealing the focused part underneath. If you make a mistake, use the History Palette to go back or hit the letter “X” to paint with the color black, hit “X” again to go back to white. If the image is a little misaligned with your first image (which can happen if your tripod shifts or it is a windy day) click on your move tool and use your arrow keys (on the keyboard) to shift the photo back into place. Repeat for all of the images in your sequence.

Alternative method: You can also use the click and drag method to stack your images. Place all of your images onscreen at the same time. Select the Move Tool (letter “V”), left click you mouse on the second image of your sequence, hold down the shift key (this will register the image perfectly on top of the image you are stacking it on), and then drag it on top of your first or bottom image. Release mouse button and then shift key. Your second image will now be highlighted in the layers palette, left click on the layer mask button (square with hole in center), paint with black to reveal the bottom image. Repeat for all of the images in your sequence.

The stack and blend technique works very well to increase your dynamic range when shooting those pesky high contrast landscapes. Don’t buy expensive split field neutral density filters; just shoot two shots, one exposed for the sky and the other for the foreground. When you get home stack and blend the light image into the dark. You can also use the stack and blend method to simulate the shift perspective of a tilt and shift lens.

Photoshop Elements users: The Stack and Blend method requires the use of layers and layer masks to work. Elements comes with the ability to use layers but not layer masks. **But** if you surf to this web page <http://graphicssoft.about.com/od/pselements/p/layermasks.htm> you will be able to download a free action which will enable you to create a layer mask in Elements. Elements users should use the alternative click and drag method.