

VIEW CAMERA[®]

ELUSIVE GIGABYTE OF LIGHT

BY STEPHEN JOHNSON—I'VE BEEN A LANDSCAPE photographer for 20 years. For the last year I have not even been carrying film. I would never have imagined the technology of photography could have evolved so quickly. I no longer think in terms of going out to photograph as a distinctly separate process from seeing the results, both ends of the process now occur together. I make the photograph, and I see the result, in real time, on the spot. That is a fundamental and welcome change.

The age of the digital landscape photograph has dawned, but it is still early on. I'm seeing my current work as an exploration and confirmation of what is possible, but it does exist in the rarefied air of a subsidized art project, rather than the day to day life of a commercial studio. But that is also now possible.

After many years of using digital technology to scan, refine and reproduce my silver-based photography, I am going full circle and cutting the silver out of the process with direct digital photography. Harking back to the experience of mid-nineteenth century photographers, I am seeing my photographs as I take them. I know what I've done. And I can do a new exposure if I'm not happy with the photograph.

I've been using the Dicomed Digital Camera Insert, invented by Michael Collette. My use of the camera began when Michael and I went out in January of 1994 for a day of shooting in and around San Francisco. After shooting some comparisons with film that first day, and being amazed at the higher quality of the digital sensor, I soon considered embarking on my 18 month project exploring the National Parks, "With a New Eye." In June of 1994, I arranged a press conference with the Ansel Adams Gallery in Yosemite to demonstrate the technology and show the first digital view camera photographs of the park, which I hadn't made yet. It put me on the spot to go up to the park and see what I could do. After a day and of half of work, I was

Right: Trees, Montara, 1994. Dicomed Digital Camera Infrared.



fairly happy with what I was seeing. Much to my surprise, even during the press conference the next weekend, I made an infrared photograph that I liked of Yosemite Falls caught mid-air blowing west.

I've always worked rather slowly when I photograph, trying to be as deliberate and careful as possible. The added options of digital technology seemed to fit in very well with that general approach. I can now not only compose carefully, I can examine a scan of the image, see the design and shape relationships as a real image. When dealing with exposure and contrast control, digital imaging really begins to shine. The camera software has a built-in digital densitometer and more than eight-stop contrast range control. I can measure highlights and shadows, change the contrast and measure again. All with only 18 seconds invested in pre-scan (in daylight using 16 at 1/50 second per line). When satisfied, or tired of fooling with the process, I can make the full resolution 130MB photograph. I have not even carried a light meter for the last year.

Part of my enthusiasm for Mike's camera was that I could use existing view camera equipment. The Dicommed scanning back I am using with my 4x5 camera is a scanning insert, essentially a battery powered scanner that fits into the camera. It comes with a 1GIG hard drive which stores about 8 full resolution photographs, many more if you choose a lower resolution. I've added a second drive to double the exposure capacity. A typical exposure in bright sunlight is f16 at 2:30. Image resolution is 6000 x 7520 pixels or about 300 dpi at 20 x 25 inches. The sensor is a 6000 element Kodak tri-linear array making red, green and blue scans simultaneously, true color separations on the fly. Detail is astounding. I'm seeing things in my photographs I could never see before. Disappointingly, some weaknesses in my lenses are also showing up, particularly some chromatic aberration I couldn't see with film, but is clearly revealed by the digital sensor. I'm seeing weaknesses in my lenses that film was never sharp enough to reveal.

But the images can take minutes to make, and I'm trying to take it into the real world. Wind is probably the greatest challenge, and always has been, even for traditional silver-based photography. Now the wind can be a disaster for the image. Anything that moves transforms into some sort of digital tri-color stick image. At times that can be interesting, mostly it is not. In one instance, the first image I chose to make in Yosemite was of the parking lot below Inspiration Point, a perfect place to start a digital photography project of the national parks in 1994. Digital tri-color stick people, buses and cars decorate the asphalt with Yosemite's famous skyline behind. The distortion was purposeful, and I think, worked. But in the Grand Canyon two months later, the gusty wind made it almost impossible to photograph.

I spend much more time in the field on an individual photograph than I would have in the recent past, working to record just what I have in mind. Much of this time would have been spent in the darkroom with



more traditional methods. But now, most of the critical interpretive decisions can be made on site, when I am making the photograph—in theory, when I care the most about the image. Losing the disconnect between when the image is made, and when it is seen, is one of the joys of this plunge into the digital recording of light. This process clearly lowers the number of photographs I make in the field, but dramatically raises my success rate.

I do worry that the technology will get in the way of inspiration. The more technology I take with me into the landscape the higher the risk I will feel distanced from the land. But I still find

that I spend most of my time looking, walking and imagining how the scene before my eyes will translate into a photograph. And although that process is essentially the same as it has always been, I am now sensing a greater freedom to try photographs where the contrast would have been unmanageable, or the color unrenderable. My sense is that there is tremendous value in my use of this digital camera.

The potential archival nature of these color images is also a long overdue step forward. Perfect copies can be made of these photographic files. As long as we have technology and care, these images can be preserved and seen, a hundred, five hundred, or five thousand years from now. To enhance this potential archival value of these images for the park project, I am carry-

ing a Global Positioning Receiver and recording the longitude and latitude of every photograph I make.

With The Digital Pond, an IRIS printing house in San Francisco, we have been making 30 x 40 prints on rag paper. Seeing my photographs on rag paper has been one of the highlights of this entire experience for me. It is also ironic that this digital process is taking me back onto a material so basic and beautiful as rag paper. My proofs are 11 x 17 dye sublimation prints made with the Radius ProofPositive printer.

When taken all together—the results on the spot, digital density readings from the image, adjustable color balance, no film grain, color separation, color purity, exact duplicates, extraordinary resolution, the argument

for digital photography is quite convincing. At least it has been for me. That is why I am spending a year and a half photographing "With a New Eye: The Digital National Parks Project with Stephen Johnson." So far, the project sponsors include Adobe, Apple Computer, Dicommed, Newer Technology, Ricoh, Sinar-Bron, and The Digital Pond of San Francisco.

My world as a photographer is changing. And it's looking much more like the world I see with my eyes. I'm recording color in my photographs that escape film. Highlights are holding and shadows are opening up like never before. I am making the first archival color photographs of my career. Grain has vanished. I'm seeing the photograph, when I am photographing, on the spot, when I should. As it always should have been.

The smells of the darkroom are being displaced by the flicker of a screen. Lung disease, supplanted perhaps, by CRT radiation. The risks remain mysterious.

Photography has always been about magic. The shutter clicks, and some unseeable change has occurred on silver coated plastic. Nothing seems to have happened. The weight of the film has not increased with the burden of the light it carries. It is a secret, to be revealed by the spirits in the darkroom. Later.

Now the photograph appears as the image is being recorded. There is evidence that something has happened, visual evidence that a photograph has been made. And it can be studied, probed, rephotographed if necessary—and worked closer to perfection, to beauty.

The way I think about making a photograph is changing. These photographs are less instantaneous in their witness, but visible while the camera remains ready. Now they take minutes to photograph, and photographic time shifts once again—from an unreal slice of a moment, to an accumulation of time slices over time.

I feel energized and stimulated to work. For me, the joy of image making has been given a good royal kick in the pants. ▲

Above: Half Dome and Merced River, Yosemite National Park, 1994. Dicommed Digital Camera.