



ARCHES NATIONAL PARK

A Grand View

TEXT BY THEANO NIKITAS • IMAGES COPYRIGHT © 2000 STEPHEN JOHNSON

In 1994, film died for Stephen Johnson. Several months earlier, Michael Collette, inventor of the Dicomed and Better Light cameras, had shown Johnson a prototype of a portable scanning back for 4x5 cameras. While Johnson was intrigued and impressed, Collette's first prototype did not deliver extra-

ordinarily high resolution (it only captured a 30MB file), required long exposures, and was somewhat cumbersome to use. Johnson challenged Collette to "come back when you can do this full 130MB file you've been talking about."

Collette did just that. In January 1994, Collette and Johnson took the

scanning insert and a film camera and went out to shoot.

"I remember being on top of Telegraph Hill [San Francisco] and looking back toward the city and the Golden Gate Bridge beyond and saying, 'Mike, your camera must be approaching the resolution of film.'" Collette replied, "We'll see, won't

we?” At that time, Johnson took Collette’s response as “probably inventor’s pride, but I didn’t really fully believe the implications.”

About five hours later, Johnson compared the digital and film images. “When I looked at the

Valley, where Johnson turned Ansel Adams’ darkroom into a MacIntosh lab. About 40 people attended, including Adams’ son Michael and his grandkids.

“It was one of those splendid days,” says Johnson who marks that

a number of panoramics, and some 20,000 images with a Kodak DSC 460.

HARDWIRED

When heading out on location, Johnson fills his backpack with his

Stephen Johnson’s National Parks project enriches the digital landscape.

detail, the color accuracy, the resolution, the dynamic range—I’m quite serious when I say film died for me that day,” Johnson says.

This feeling was further reinforced when they took one of the files to The Digital Pond, an Iris printing house, and had a 30x40-inch print made. “It completely blew everybody away,” recalls Johnson.

FOREVER CHANGED

Although Johnson realized “something had fundamentally and forever changed,” he did not know how he was going to integrate this breakthrough technology into his work. But it wasn’t long before he “dreamed up something that sounded like it would be really hard, like it would really be a challenge to see if it were real.”

Johnson was aware that the American National Park system had its roots in landscape photography. After all, images by landscape photographers had helped certain stretches of land attain National Park status. But Johnson would add a new twist to the role of the photographer in national parks: he would photograph park landscapes digitally.

“It seemed like an appropriate thing to do, to make the first major totally digital landscape project be about the National Parks.”

This National Parks project began with a press conference in Yosemite

day as “the beginning of the National Parks project I named ‘With a New Eye.’”

Since then, Johnson’s been on the road for about six years, visiting 50 parks, from Alaska and Hawaii to North Carolina. He’s shot about 3,000 full-resolution files, as well as

Better Light digital scanning insert, a G3 Macintosh PowerBook, and lenses. He also takes his Sinar x camera in its own packing case, a Gitzo carbon fiber tripod, a panoramic head, and a GPS receiver for documenting each image’s location. Since 1995 he’s also brought



BADLANDS NATIONAL PARK

“When I looked at the detail, the color accuracy, the resolution, and the dynamic range of the digital images—I’m quite serious when I say film died for me that day.”



GRAND CANYON NATIONAL PARK

along his Kodak DSC 460 for documenting the project and photographing “anything that moves too much for the scanning camera or when the weather’s too bad to use the scanning camera.”

His PowerBook has 512MB RAM, an internal 12GB hard drive with 6, 8, and 10GB drives in removable bays so storage isn’t an issue. The PowerBook has a media-based CD writer so he’s now able to write CDs while on trips.

The Better Light camera has a 6GB drive, and although he can put more storage in the camera, the 6GB is usually more than sufficient. Johnson points out, “If we’re talking about what’s possible to do in a day—even at 130MB a piece—6GB is plenty of storage, because I can’t shoot more than maybe 30 to 40 images.” But 40 4x5 shots in a day is “an incredibly unusual amount that’s almost unheard of because it’s just work beyond belief.”

THE SKINNY ON SCANNING BACKS

"I would never call myself a digital photographer," Johnson said recently. "I'm a photographer in the year 2000 using the best tools available to me. That means I use digital equipment."

Topping Johnson's list of digital tools is his Better Light digital scanning back. Scanning back cameras are used by a wide range of photographers who generally need to create relatively large, high-quality files for commercial, advertising, architectural, art reproduction, landscape portrait purposes.

These cameras function much like a flatbed scanner, recording digital information with the assistance of a precision stepper motor that moves a trilinear array CCD across the camera's "film" plane and exposes one line at a time.

"Trilinear array" refers to the three rows of CCD elements, coded with RGB filters, that are being recorded in sequence (one each for red, green, and blue). The filtration is necessary because CCDs are monochrome (they can only detect black and white).

Better Light digital scanning backs use Kodak's trilinear color CCD technology to deliver a high dynamic range with low noise and smooth gradations. Providing continuously adjustable color balance and sensitivity from ISO 100 to ISO 1600, the backs insert into any 4 x 5-inch view camera like a standard film holder.

The photographer focuses and composes on the camera's ground glass, while the system's large imaging area preserves lens coverage and perspective (72 x 96mm; 120mm diagonal). Built-in flicker rejection allows the camera to be used with any continuous light source, and an internal disk drive is used for interim storage of captured images. A panoramic option allows seamless 360-degree digital panoramic imaging.

For outdoor photography, portability is essential. The Better Light rechargeable battery and carrying case make the camera suitable for studio, location, and field photography of the type done by Johnson.

Better Light's cameras can make a full-color, 750 x 1000 pixel prescan in 8 seconds. The new Super 8K also provides up to 12000 x 15990 pixel resolution (549 MB).

For more information on Better Light scanning back cameras, contact Better Light at (650) 631-3680 or email info@betterlight.com.

FURTHERING THE CAUSE

For the past couple of years, Johnson has alternated working on location with working in the studio. He's in the process of finishing bound portfolios of his National Parks project. Interestingly, while he hadn't anticipated it, Johnson has found that collectors want to purchase his portfolios, so printing keeps him pretty busy.

He's currently using the Epson 9500, a pigment-based inkjet printer, and loves the ability to print on rag paper. Rag paper seems a perfect fit with Johnson's images, which are subtle and subdued.

"If I look back over the last 23 years," says Johnson, "that's where the work's been going since the very beginning. I just wasn't hip to it for the first few years."

This subtle color palette, he points out, "is so much of what traditional film and traditional color photography has ignored."

But Johnson's work—past and present—is about more than capturing beautiful images.

"As my good friend David Bohn often says in his writings, we do have an obligation to give back."

Johnson hopes that his work can, in some way, "further the cause of trying to preserve these wild places, not only for their scenic value, but

ultimately for that larger ecosystem: planet earth."

Corporate sponsors for "With a New Eye" include Adobe Systems, Apple Computer, Better Light, DayStar Digital, Dicomed, Digital Pond, FWB, Iris Graphics, Newer Technology, Radius, Ricoh, and Sinar Bron.

Visit Johnson's fine art gallery and studio in Pacifica, near San Francisco (650-355-7507) and his Web site, www.sjphoto.com.

STEPHEN JOHNSON'S GEAR BOX

DIGITAL CAMERA(S)
Dicomed 4x5 digital inser t
Better Light 4x5 scanning inser t
Kodak DCS 460 (on Nikon N90s body)

LARGE-FORMAT CAMERA(S)
Sinar-X 4x5 view camera
Sinaron 65mm,150mm,300mm lenses
Schneider 90mm,210mm lenses
Goertz Red Dot 600 mm lens
Gitzo carbon fiber tripod

DIGITAL EQUIPMENT
Prototype panoramic Adapter by
Better Light and Bayhouse
Epson 9500 printer
Macintosh PowerBook 540c, 3400c
Newer Technology RAM
FWB, Inc. drives
Apple System 8.6 and 9.0
Adobe Photoshop 5 & 6
Scanning software for Dicomed Camera
(Better Light software)
Canto Cumulus image database software

ACCESSORIES
Gitzo Carbon Fiber Triod



VOLCANOES NATIONAL PARK