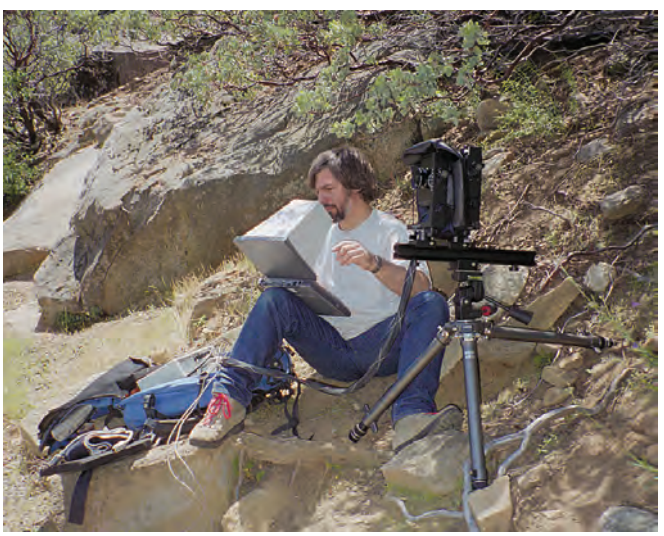
STEPHEN JOHNSON

BY ANNE TELFORD



TOOLBOX

COMPUTERS

Quadra 950 with 256MB RAM, 1.2GB HD, Seagate 400MB drive*
Quadra 950 with 256MB RAM, Daystar PowerPC Board, 500MB drive
Mac IIfx with 128MB RAM, HP 1.2GB drive, CDC MB drive
PowerBook 140 with 6MB RAM, 40MB HD
PowerBook 540c with 36MB RAM, 320MB HD

MONITORS

SuperMac 20T, Apple 21", SuperMac PressView 21"

DRIVES

Toshiba CD-ROM, Bernouli Transportable 150, Ricoh 600MB, Magneto Optical, Ricoh 1.3GB Magneto Optical, Relax SyQuest 44, Relax Archive Python DAT tape, Ricoh CD-ROM Writer

SCANNERS

Agfa Horizon, Leafscanner 45, Agfa Arcus Plus, UMAX 1200, Ricoh IS60

PRINTERS

SuperMac ProofPositive dye-sublimation, Ricoh PS6000 laser

MISCELLANEOUS

Dicomed Digital Camera
Wacom Graphics Tablet
Supra Fax Modem v14/32
Agfa Forte film recorder
LeafLink fiber-optic network

SOFTWARE

Apple System 7.1.1
Adobe Photoshop 2.5.1
Adobe Illustrator 5.0.1
Aldus FreeHand 3.0
Aldus PageMaker 5.0
QuarkXPress 3.2
Microsoft Word 5.1
Caere Omni-Page OCR
Adobe Type Library

**All RAM supplied by Newer Technology*

PHOTOGRAPHY HAS ALWAYS USED THE highest technology of its time," says Stephen Johnson, a pioneer in the digital photography realm. A conventionally trained photographer whose clients have included Eastman Kodak, Adobe Systems, SuperMac, Leaf Systems and the Friends of Photography, Johnson has embraced modern technology, feeling that to ignore the advances it offers would be a great loss. However, he cautions, "A new world of responsibility and opportunity awaits when you take control of tasks that used to be handled by other graphics professionals."

Using sophisticated scanners and the newest digital cameras, he has rigorously tested and applied these tools to his unique vision of the natural world. Sarah Adams, granddaughter of his friend Ansel Adams, says, "I think my grandfather would have loved this technology, he was always excited by new creative possibilities." In fact this June, Ansel Adams's Yosemite darkroom was the site for a photography first. As a personal project, and homage to Adams, Johnson made the first digital view-camera photographs of Yosemite's valleys and peaks with the Dicomed Digital Camera and then opened his files and made the first digital prints in Adams's darkroom.

The 38-year-old photographer/designer lives in Pacifica, California, with his wife, designer Mary Ford, and their two children. The couple share a studio, located in the spacious living room of their comfortable home. Beyond the bank of high-powered Macintosh computers, scanners and dye-sublimation printers, is an expanse of inspiring scenery,

Right: "Cattle Grazing, Merced County," 1988; 4 x 5 Kodak Vericolor negative. "I stopped the car along Highway 140 on the way back from Yosemite. The clouds, cattle and hills caught my eye and I set up and made a few exposures. After about 20 minutes I had done what I could with the scene and started to put the camera away. Then the light broke out like a spotlight in the middle of my frame. I grabbed a film holder and made an exposure. As happens far too often, by the time I turned the film holder over for another shot, the light was gone. If the camera had not already been set up, the photograph could never have been made. It seemed to belong on the cover of the The Great Central Valley."

"Burned Trees and Flowers, Foresta," 1994, from "The First Digital View- Camera Photographs of Yosemite;" 4 x 5 Dicomed Digital Camera; 6,000 x 7,500 pixels. "I've watched the Foresta burn gradually come back to life during the last few years. The display of lupines among the black trees was an irresistible draw. Ultimately, the far more subtle play of grasses, flowers, brush and trees proved more interesting. Normally the images I discover while wandering are better than those I stop for. The contrast was quite high and I was interested in the challenge of holding detail in the burned black of the trees while still

all the way to the not-too-distant Pacific Ocean.

His work has appeared in a number of publications including *Audubon*, *American Photographer*, the *New York Times*, *Sierra*, *Omni* and *California* magazines. His first book, *At Mono Lake*, assembled the work of 50 photographers and 100 years of photography to draw attention to California's endangered desert sea. Johnson's most ambitious project to date is one close to his heart. *The Great Central Valley: California's Heartland* book written by Gerald Haslam, showcases his and colleague Robert Dawson's photographs, as well as many vintage 19th and early 20th century photos that Johnson scanned and digitally restored. The book project began in 1987 at the dawn of the desktop digital era. Johnson edited and designed the book, and ended up scanning many of the images used. "It turns out I did half the scans in the book, although I never intended to," he explains. "It just worked out that way because I kept making decisions to include something. I had the original or copy here, I had the scanners here and it made as much sense to scan and prepare the artwork for reproduction as to just do mock ups."

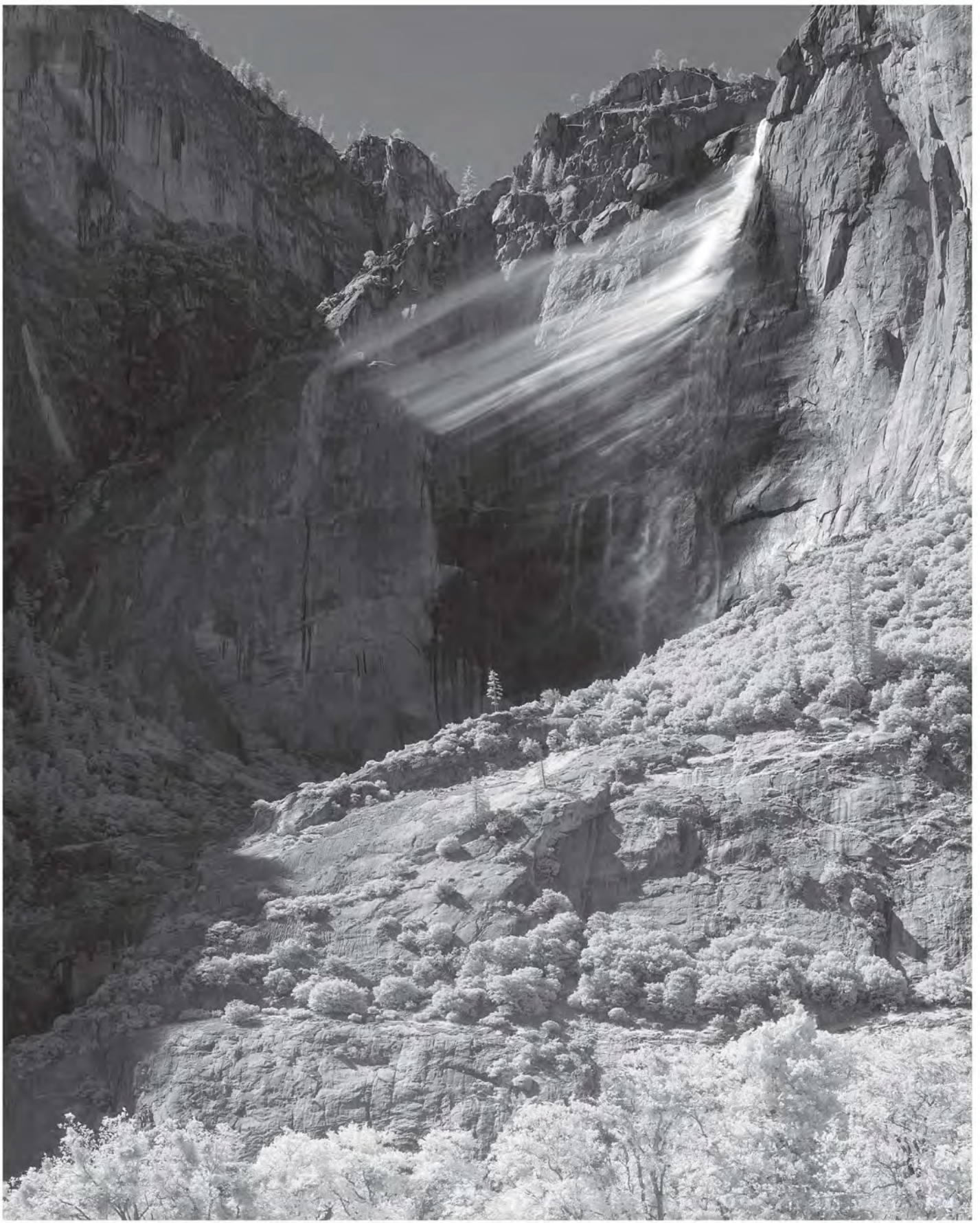
The book, four years in the making, recently won the 1993 Bay Area Book Reviewers Association award for nonfiction and a 1993 Commonwealth Club Silver Medal

This page: "Elvira Broughton," 1937, photographer unknown; Agfa Horizon scanner. From left to right are shown the Red channel, Blue channel, Red and Blue channels blended, and a mask Johnson created. "I wanted to minimize the red/magenta marks on the face and the background abrasions. By doing a color scan of the print, I could separate different aspects of the damage onto different color channels. I blended the Red and Blue channels together into a black-and-white file devoid of the red markings, then using a mask, I brought only the blue channel into the background. I picked a color from the original color scan and recreated a color palette similar to the original scanned image tone."

Right: "Yosemite Falls, Infrared," 1994, from "The First Digital View-Camera Photographs of Yosemite;" 4 x 5 Dicomed Digital Camera; 6,000 x 7,500 pixels. Location: 37° 44' 39.66" N by 119° 35' 23.70" W 3967 feet. "The Ansel Adams Gallery and I held a press conference in Yosemite on June 17 to show the first digital view camera images of Yosemite and demonstrate the technology. We walked over to the meadow across from Yosemite Village for the requisite shot of the falls. I didn't expect much from this photographic cliché, but I went ahead and put together a composition. The color shot was fine, but we were all intrigued by what an infrared might look like. I proceeded to make the photograph, and just as the scanning element reached the falls, the wind kicked up from the east and blew the water diagonally to the west during the entire time the camera was imaging that area of the frame. Ansel Adams's son Michael Adams turned





Award. It has garnered an impressive number of glowing reviews as well as a feature essay on PBS's "MacNeil/ Lehrer Newshour," narrated by noted California writer Richard Rodriguez. The project reacquainted Johnson with where he grew up, and reinforced the fundamental goals of his work: "To visually explore the emotional bond I feel with the natural world, and to create compelling art that suggests that kinship. And I want to expand the role artists play in helping to shape our political and social environment."

In fact he is such a believer in the potential of the new technology, he owns two smaller scanners he regularly lends to photographer friends who are interested in experimenting with scanning their images.

One area in which Stephen has made great strides is restoration. He believes the artifacts of age are part of any photograph and is very careful about what he restores and what he leaves intact. While he feels comfortable color correcting and spotting in Adobe Photoshop, he would not remove a large dust spot if it involved recreating a physical feature, e.g., a person's hairline or foot. His fundamental guideline: No real objects should be added or removed from a photograph. The digital compositing work is a completely different area.

"I'm trying to be as true to my original vision as possible and merely clean up the artifacts, which I've always done—dust on the film, scratches and problems of that nature. People ask me about moving trees or adding moons. I'm not interested in doing that with my landscape work. I would call that manipulation. Removing the dust, getting the color as accurate as possible, or changing the contrast to suit my taste—I believe that's more in the realm of interpretation rather than manipulation," he says. "My fundamental goal is to reproduce the negative as accurately and as beautifully as possible."

Johnson removes dust from the negative or print, then he scans the photograph into his Quadra 950 using a Leafscan 45™ for film or his Agfa Horizon™ for prints. As much as possible, tonal corrections are done in a pre-scan mode, customizing the scan to the needs of the negative and creating a scan that needs little editing. In Photoshop he sharpens the scan to bring it back to the sharpness of the original film, straightens the scan if the image was not placed squarely in the scanner and cleans up dust spots.

While Stephen admits that photographic beauty is subjective, he says, "…I do believe that a black and white photograph can glow when it contains a rich black in the deepest undetailed shadows, and a pure white in the highlights." And his aim is to arrive at a final print with just that tonal range, if possible. "In color," he says, "I see a world of light-filled pastels, and I strive to record those impressions."

He is presently archiving a 600 image glass plate collection of early 20th century Central Valley photographer Frank Day Robinson using the Agfa Horizon scanner; one element he must deal with is damage to the vintage glass plates from mold, stains and abrasions.

"Ultimately a lot of these images have a life and beauty if left alone and unrestored. At this point, I've done nothing with most of these files except scan the plates and make the digital prints," Johnson says, pulling prints out of a flat file. "Here's an example where the emulsion is lifting right off the glass. I would not do anything to change this. Painting out the missing emulsion might not give some people any problems, but I think there's some beauty to the way time has worn the image. You start to destroy the historical value of the image by faking areas back in. And that is tragic."

Stephen's enthusiasm is contagious. He works with great concentration, but laughs easily, making minute adjustments to a black-and-white photograph's duotone curves while explaining the process in a straightforward, educational manner. He's had plenty of practice educating others through the digital photography workshops he teaches all over the country and from seventeen years of teaching traditional photography. He wrote the duotone curves that ship with Photoshop. In addition, he has written an important primer on the digital process: a 48-page booklet entitled *Making a Digital Book: Art, Computers, Design, & the Production of The Great Central Valley: California's Heartland*. The booklet explains the creation of the book and describes Scanning & Image Editing, Duotones & Photographic Reproduction, Equipment & Software, among other useful topics.

"As a photographer I never planned on being a color separator, or a scanner operator, but that's part of what's happening," he asserts. "We're moving into a time period where the individual artist has the opportunity to really take control of their work, but at the same time, there's this vast body of responsibility that we're going to have to take on as well. It really is a double-edged sword."

As a result of these technological advances, Stephen's pastel color work has become more reproducible. "It's always a battle in the color separation process because people are used to gutsy, rich, saturated color."

The issue of photographic veracity has always been a hot topic, but with digital imaging, the debate has taken on a new dimension. "We should have been more suspicious

Right: "Trees, Montara," 1994; 4 x 5 Dicomed Digital Camera. Location: 37° 49′ 40.3″ N by 122° 29′ 53.7″ W. "Michael Collette brought his digital camera over to show me in September 1993. By January he was making full 130 MB files and I was very intrigued. We started going out and photographing together. In March I made this photograph, the first with the digital camera that I really felt rose to the quality of the best of my work."

"Eroded Hills, Central Oregon," 1987; 4 x 5 Kodak Vericolor negative. "A very hot day in Central Oregon led to the soft photograph of these patterned hills."

of photographic truth all along," Johnson says. "The whole notion of a photograph being a literal rendition of reality is very highly suspect for a lot of reasons. We choose what we look at very carefully. Isolating one view from another view can be interpretive to the point that it makes something unique and beautiful. At worst though, our cameras can be so selective in their view that they severely distort the continuum of the event actually taking place.

"The whole notion of image manipulation has been with us since the 1850s. We need to remember that. It has risen to high art with people like Jerry Uelsmann who does wonderful photographic montages that become art forms and performance pieces in and of themselves. The craft of manipulation reaches sinister heights with the probable faking of photographs of Oswald or similar intrigues, where the rich and powerful have the ability to do just about anything they want in terms of manipulation of an image to make us believe their story."

What about the paper cup that mars the otherwise pristine landscape featured on the cover of *The Great Central Valley*? "We're in a time period where there's a lot of loose ethics with regards to how images are treated," Stephen says. "I don't really feel any differently about digital imaging than I do about my traditional photography. I would not spot that cup out with a spotting brush on a silver print and I'm not going to spot it out on a digital print.

"When you look at the photograph there is very little that's natural or pristine. The grasses are non-native grasses. The cows are not native to California, neither are those eucalyptus trees in the back. The Coke cup was thrown into the landscape. We have the sky and the line of the hills. That's about it for natural. So, I think the cup actually kind of belongs."

Johnson repeats the lament of all photographers, that dust is the enemy of photography. What does he consider the enemy of digital imaging? "Maybe the temptation to lie," he says thoughtfully, then adds, "you're still fighting dust, because dust and photography are at odds throughout the process. And of course you add dust in the scanning process too. But the integrity of the scene as I saw it is something I try very hard to preserve."

He now has a whole new set of controls over his images. "For example, in the darkroom you generally make global contrast changes by choosing the contrast of the paper and then you often fight that back by using a paper developer that is going to bring up the highlights. So you have a little bit of intermediate tonal control. But when an image is digital, I have the ability to treat the contrast in completely different areas of the tonal range independently and contradictory to each other if needed.

"Part of what is going on there is that you are battling film's inability to see light the way the human eye sees it. As long as film brings limitations, it makes sense to choose the palette of distortion that you want and choose a film type to your liking. But we shouldn't kid ourselves. Color film has a very limited gamut or range of vision; a narrow view of what our eyes see. One of the real promises of electronic darkroom software like Photoshop is the ability to correct some of the distortions of conventional film.

"But I'm most excited about shooting digital originals and being able to bypass some of film's prejudices and inabilities, working toward a whole different way of looking at color and light. And it's very much in keeping with my palette anyway because a digital photograph doesn't necessarily saturate color.

"One of the things I'm able to do now with the Dicomed Digital Camera, my view camera and my Apple PowerBook is to see photographs in the field as I am making them. I can actually open the image and look at it on screen while I'm still standing there and see if I've got what I want. What that means is this whole notion of what Ansel [Adams] developed with his Zone System is carried over in this elegant way because I can now choose the contrast I want to impose before I even make the photograph and see the results on the spot. We have this whole additional set of possibilities with regard to tonal range, color balance and contrast that open up new ways of seeing the world."

Along with this new vision, comes responsibility for reinterpreting and changing the nature of the way we see the world. Stephen Johnson's hope is that digital photography will enable us to see the world more personally than ever before, and perhaps more sharply as well.

"Skull and Quilt," 1993; Leaf Digital Studio Camera; 2,048 x 2,048 pixels. "My wife's great grandmother's 1886 quilt seemed a perfect setting for this skull. We were experimenting with the Leaf Camera, and it seemed natural to look for very old subjects to photograph with this very new technology."