

Piezography™ Quadtone Printing and the Future of Black & White Photography

by George DeWolfe, Contributing Editor, Camera Arts Magazine

Quadtone Inkjet Printing is less than 3 years old. In that time we have come from crude software and less than archival dyebased inksets to a consistent driver and a high quality and permanent pigment-based ink solution. This solution uses Epson inkjet printers and high quality third party media. The result of research, cooperation, and constant iteration between manufacturers and individuals has built a solid and ongoing coalition. The efforts of Epson, Cone Editions, Legion Paper and the Camera Arts research group have literally changed the way we will do Black & White printing. The Cone Editions PiezographyBW for the Epson Stylus Color 3000 and other Epson printers represents a watershed from traditional to digital printmaking. The result is a Black & White digital print that is aesthetically beautiful and archival.

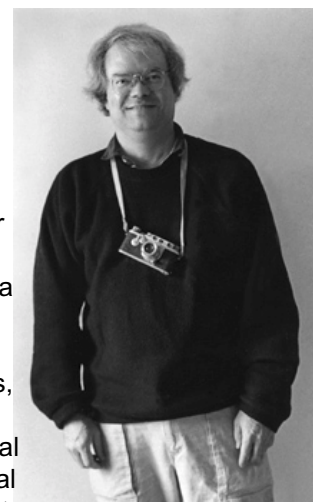
The Quadtone Printing process has been around for years in the offset printing industry. Four different printing plates are run in succession much like the four color CMYK process, except that all the colors are changed to 4 different tones and densities of black. The combination of scanned high quality Black and White negatives and prints, a dependable printer, a high resolution printer driver, the Piezography BW Quadtone inkset, and archival papers have enabled us to produce prints from an inkjet printer of higher quality than we traditionally produced with silver and platinum media. The Quadtone Print produces a quality that preserves the light and tonal values of the subject in a more efficacious way than traditional prints. The image somehow looks more real.

I first met Jon Cone, President of Cone Editions, at a New York trade show several years ago. At his booth he had displayed some beautiful warm-toned B&W prints. "Nice Platinum prints," I remarked. "They're not Platinum, they're digital," he said. At close examination I was amazed to see that there were no telltale inkjet printer dots in the high values, and the prints were continuous tone like a traditional B&W image. He told me these were his newly invented DigitalPlatinum for IRIS prints and that he was developing a similar process for the Epson 3000 inkjet printer. "I have a 3000," I said, "Do you take Master Card and Visa?" Six months later, and after much email and telephone exchange, I was one of the first to get this new Quadtone inkset, driver, and profiles. The first print was so good that I said to my son, "Luc, we've got to phone this one in."

Scientists and artists have long searched for a re-

placement for silver in photographic images. Silver is a precious metal and hence not inexhaustible as a source for photography. Kodak, in the 1970's, experimented with iron salts, but the real answer came with the introduction of digital imaging. I saw my first digital image at PMA in 1984 and it was terrible. With advances in computers, however, over the next 6-10 years, and with the introduction of Adobe Photoshop, digital imaging came of age, first in the printing industry, and then to photography. The Iris printer was introduced in the early 1990's, but was far too expensive for most photographers. By the mid-late 1990's Epson had produced the 3000 inkjet printer and the radically new Epson Photo Stylus line of 6-color printers. But there were still major problems.

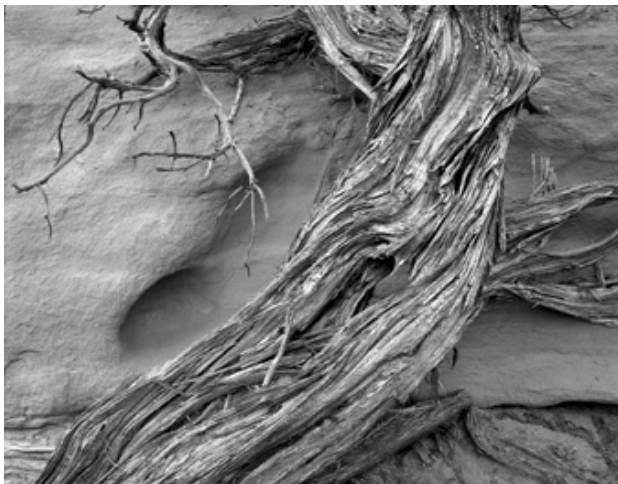
Visible highlight dots, jumpy B&W values, archival considerations, poor monitor calibration, lack of good profiling, and a scarcity of quality substrates continued



George DeWolfe, Bullhead Creek ©2001

to vex digital printmakers up until 1998. Cone Editions' introduction of Piezography BW fixed all of these problems except one - high quality digitally sized paper.

With the introduction of Piezography™BW, Cone sought a complete and radical solution to quality B&W printing. He insisted on a calibrated monitor achieved through the now famous Color Blind Prove It! , and invented a new driver that exported from Photoshop bypassing the Epson driver's highlight dots and increased the resolution from 720 dpi to 2160 dpi instantly. In addition, he profiled the carbon pigment Quadtone inkset with various new high quality papers so that the result was nearly flawless, with no curve adjustments that digital printmakers had to perform up until PiezographyBW. With these controls, and the dot gain settings in Photoshop, photographers now have control over tonal values from 0-100%. Complete control.



George DeWolfe, *Tree, Arches* ©2001

Cone Editions' Piezography is revolutionary and has, overnight, changed the history of photography. It is the answer to traditional photography's toxic chemical heritage and is environmentally safe and sustainable. The print is as aesthetically beautiful as silver, and as archival. The control in the "lightroom" over tonal values is light-years beyond what we ever had in the "darkroom."

I have been a B&W photographer for over 35 years. I studied with Ansel Adams and Minor White, and I know what a beautiful print is. Cone Edition's Piezography has changed the way I work, and it has changed the way I see. It has allowed me to expand my vision into subtle tonalities I didn't know existed, thus changing the way I look at the light and, in altering this, changes the shape and motion of the subject photographed, delineating the spirit of the image. If Ansel were alive, he'd be into this bigtime.



George DeWolfe, *Clouds and Seascape* ©2001



George DeWolfe, *Bunchberry* ©2001



George DeWolfe, *Somesville, ME* ©2001

Note: George DeWolfe's images are available on the Media Kit CD-R or by contacting Cone Editions Press, Ltd.