

Digital Process and Print Series | Series Editor: Harald Johnson

Includes  
Tips and  
Techniques  
from More  
Than 20  
Photographers  
and Other  
Artists!

# 301

# Inkjet Tips and Techniques

An Essential Printing Resource for Photographers

Andrew Darlow



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This book is dedicated to the memory of Ms. Edwina M. Kohler.

Your support as an educator, adviser, mentor, and friend were invaluable in helping me to achieve so many of my dreams. You are dearly missed and are always in my thoughts.

## Foreword

**F**rom the birth of photography in the 19th century with the work of Frenchmen Joseph Nicéphore Niépce and Louis Jacques Mande Daguerre, Englishman William Fox Talbot, and American John Locke, until today, at the beginning of the 21st century, the ultimate goal of photographers has always been to show their best work as prints. Early prints were generally made in black and white, then often sepia-toned to make them not only appear more stylish but also make them more *lightfast*, or able to endure the test of time.

Throughout photography's comparatively short history, many prints did not last well, especially some made in the second half of the 20th century; sometimes photographs vanished from their media or paper within days, taking with them an important window to the past. This happened when some irresponsible manufacturers attempted to enhance their profits and please stockholders by moving from black and white to color products virtually overnight.

Today, with the best of modern inkjet printers and materials, we find ourselves at a point like no other in the history of photography. We can now photograph using a digital camera or scan an existing image and then immediately make a final print, generally on our media of choice without the need of a darkroom or lengthy procedures. Best of all, that final, correctly stored, picture, made using the best of materials, will outlive us all, carrying with it its information and aesthetic statement well into the future.

For someone like me, who has spent more than 50 years of his life photographing, this is not only monumental but exceedingly exciting. I would like to think of my best work living well into the future.

Andrew Darlow's dedication, concern, and research make this new volume an essential tool to anyone interested in printing and preserving their photographs.

Douglas Kirkland—Los Angeles, California  
[www.douglaskirkland.com](http://www.douglaskirkland.com)

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Finally, I'd like to sincerely thank all of the guest artists and other individuals who contributed to this book. It is a true honor to share these pages with them.



## About the Author



**Andrew Darlow** is a photographer, educator, and digital imaging consultant based in the New York City area. For over 15 years, he has consulted on the topics of digital photography, digital output, and color management for individuals and corporations. His commercial and consulting clients have included Brooks Brothers, Kenneth Cole, Tiffany & Co., Tourneau watches, Cigar Aficionado, and The Body Shop.

As Editorial Director of *Digital Imaging Techniques* magazine, he wrote and edited numerous articles and reviews on the topics of digital and fine art photography, inkjet printing, and Photoshop techniques. He has lectured and conducted seminars and workshops around the world at photo-related conferences, and for photography organizations and schools, including Advertising Photographers of America (APA), The Center for Fine Art Photography, Professional Photographers of America (PPA), the Arles Photo Festival, Columbia University, and the International Center of Photography (ICP) in New York.

His photography has been exhibited in group and solo shows, and his inkjet prints are held in numerous private collections. His work has been included in many photography publications, web sites, and books, including *PDN Gear Guide*, *PDNOnline*, *Studio Photography & Design*, *Mastering Digital Printing* (Thomson Course PTR), and *Essentials of Digital Photography* (New Riders).

Andrew is editor and founder of The Imaging Buffet Digital Magazine and Podcast ([www.imagingbuffet.com](http://www.imagingbuffet.com)), and he publishes the Inkjet & Imaging Tips Newsletter, which includes news, tips, and techniques on fine art printing and digital imaging. Andrew can be reached via e-mail at [imaging@andrewdarlow.com](mailto:imaging@andrewdarlow.com), and for more information, visit [www.inkjettips.com](http://www.inkjettips.com).

# About the Series Editor

**Harald Johnson** has been immersed in the world of commercial and fine-art imaging and printing for more than 30 years. A former professional photographer, designer, and creative director, Harald is an imaging consultant, the creator of the web site DP&I.com ([www.dpandi.com](http://www.dpandi.com)), and the author of the groundbreaking books, *Mastering Digital Printing: The Photographer's and Artist's Guide to High-Quality Digital Output* (2003), *Mastering Digital Printing, Second Edition* (2005), and *Digital Printing Start-Up Guide* (2005). Harald is also the founder of YahooGroup's digital-fineart, the world's largest online discussion group on the subject of digital fine art and digital printing.



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# Introduction

I love photography. One analogy I can make to help describe how I feel about the medium is to compare my passion for photography with Private Benjamin Buford “Bubba” Blue’s obsession with shrimp from the movie *Forrest Gump*. I love making photographs. I love talking with photographers about their photography. I love looking at photographs online, in magazines, on billboards, in galleries, and in museums. I love working on photographs in Photoshop and other image editing software. I love visiting photography exhibitions, hearing photographers speak about their work during live presentations, and watching documentaries about photographers and their work. And as you might have guessed, I love printing my images as photographic prints in the traditional and digital darkroom.

I also love helping others to learn how they can produce better images and use their computers and printers to express their thoughts, feelings, and vision. These are the primary reasons I’ve written this book, and also why I’ve asked a group of photographers and other artists who I greatly respect to contribute to the book.

*301 Inkjet Tips and Techniques* contains specific tips and techniques related to digital output, and many additional online resources are referenced throughout the book. The tools necessary to make high quality prints in one’s office, studio, or home that can stand the test of time for decades (or in some cases, centuries) have become much more affordable over the last 10 years. This book contains hundreds of examples of how you can start making high quality prints, or improve your existing printing workflow.

There are many books, online resources, and printer manuals with step-by-step instructions for making prints on inkjet printers. Although this book includes a number of step-by-step techniques, the book focuses more on other topics, including: how to find the right printers, how to save time and materials when prepping files and prints, how to manage your images better, how to create captivating portfolios and framed art, and how to determine if a RIP (Raster Image Processor) is right for your work.

As a consultant and instructor, I’ve been able to see first-hand the expression on many people’s faces as a photograph of their children, or an image from their most recent magazine assignment, or a landscape image from a trip to the other side of the planet exits an inkjet printer. Often, they are not prepared for the emotion that comes over them, and those moments, for both them, and me, are priceless.

If through this book, I can help readers create images and prints that produce similar positive emotional reactions, then the time and effort spent gathering information, testing papers and printers, finding guest artists to share a similar passion for their work, and putting it all together, will have been time and effort very well spent.

## Who This Book Is For

*301 Inkjet Tips and Techniques* was written for advanced amateur photographers, professional photographers, illustrators, painters, designers, and other artists who print their commercial and fine art work using inkjet printers. If you are in one or more of these categories, you will find many tips, techniques, and resources aimed at helping you choose the right printers for your needs, improve the quality of your images prior to printing, find appropriate papers and other materials, and understand more about color management and print permanence.

That being said, anyone who owns an inkjet printer, from a family with an “all-in-one” or 4 × 6-inch compact printer who wants to create scrapbooks that serve as a historical archive, to the production manager of a large printing company who needs to make four-color separation proofs can benefit from many of the tips in this book.

## What Equipment You Need

Though no specific image editing software is necessary to benefit from most of the tips and techniques in the book, many of the tips reference Adobe Photoshop due to its popularity among photographers of all levels, its overall capabilities in the areas of retouching, sharpening, and converting to black and white, and due to the way in which the application integrates very well into a color-managed workflow. And when the word “Photoshop” is mentioned in the text, it primarily refers to Photoshop CS2 and CS3.

For those readers who do not own Photoshop CS, CS2, or CS3, Adobe Photoshop Elements is generally recommended because it contains many of the features found in Photoshop CS2 and CS3. Apple Aperture and Adobe Photoshop Lightroom are two other popular “color management- (or ICC-) aware” applications mentioned in the book, and step-by-step printing tutorials for both will be covered in detail on the book’s companion site at [inkjettips.com](http://inkjettips.com).

To do any of your own printing, you will, of course, need a computer and printer. Though many of the tips in the book apply to any operating system and any inkjet printer, the majority of tips focus on how to get optimal results from pigment-based printers made by Canon, Epson, and HP with computers that run the Windows XP,

Windows Vista, or Mac OSX operating systems. Dye-based inkjet printers are also covered, especially when they have received very favorable permanence ratings on specific papers or other media.

Monitor calibration hardware and software, as well as proper lighting, are important aspects of any repeatable, color-managed workflow, so I recommend first reading the tips that cover those topics in Chapters 4 and 14 if you do not currently use a monitor calibration device and a controlled lighting system.


## How This Book Is Organized

The first eight chapters of this book include my photographs, tips, and techniques, and the balance of the book (Chapters 9–16) contains images, tips, and techniques individually written by more than 20 guest artists. The book can, of course, be read sequentially from Chapter 1 to 16, and the content from Chapters 1–8 is arranged in a way that generally follows a progression that one might take. For example, Chapter 1 is named “Getting Started,” Chapter 2 is “File Preparation,” Chapter 3 is “Choosing an Inkjet Printer,” and Chapter 7 is “Portfolio and Presentation.” However, the book was written to allow for exploration without having to follow along in any specific order.

Guest artist chapters are similar in layout to the first eight chapters, and they are organized into specific categories by chapter. For example, Chapters 9 and 10 cover inkjet paper, canvas, and coatings; Chapter 13 covers image tracking, editioning, and exhibitions; and Chapter 15 covers innovative art applications using inkjet printers. The table of contents and index should help you to more quickly find the information you are looking for, or you can enter specific words into the search box on the book’s companion site at [www.inkjettips.com](http://www.inkjettips.com) to find which tips in the book match your search terms.

## About the Book’s Images

Most of the left-hand pages in *301 Inkjet Tips and Techniques* contain a full-page image on a white background. These pages, as well as the double-page images in each chapter’s opening spread, display the photography and other imagery of guest artists, as well as my photography. In almost every case, left-page images have a caption at the bottom of the facing page that contains a significant amount of detail about the image, including: print size, the camera or process used to capture the image, the printer used, RIP or driver info, inkset, and lens and exposure data.



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Getting Started – Getting Started – Getting Started – Getting Started – Getting Started – Getting St...

## Decide Whether Inkjet Is Right for You

**Y**ou might think that a book dedicated to tips for inkjet printing would skip all other printing technologies, but this book takes you a step further and helps you consider which technology is best for you. In fact, after reading this section, you might decide that inkjet printing is not right for your needs, or you might opt for an outside printing company to print your work for you. The aim here is to give you enough information to help you make the right decision for your imagery, style, and business requirements. Chapter 3, “Choosing an Inkjet Printer,” will revisit some of the topics covered here, with specific suggestions for helping to choose the right inkjet printer for you based on several factors.

To find the web links noted in the book (L1.1, etc.), visit [www.inkjettips.com](http://www.inkjettips.com) or [http://www.courseptr.com/ptr\\_downloads.cfm](http://www.courseptr.com/ptr_downloads.cfm).

**TIP 1 Determine your budget for a printer or multiple printers.**  
Every printer has a price tag. Find one that meets your budget, and don't forget shipping costs and any potential extras, such as a printer cable, an optional Ethernet adapter for network printing, RIP software, extended maintenance contract, electricity costs, and so on. If the work you do is time-sensitive, you should consider having a backup printer, which of course adds to the overall cost.

**TIP 2 Figure in the added cost of ink and paper.**  
I've tested and used over a hundred different papers, canvases, and other materials over the last 10+ years, and I've spent thousands of dollars on sampler packs and boxes of paper. If you want to test and keep in stock a large variety of papers, consider the costs involved. Also, if you are unable to wait for ink to be shipped, or if you can't purchase it at a nearby store when you run out, then you will need to always keep extra ink on hand.

Photographer: Andrew Darlow; Image title: Dancing Pepper; Print Size: 17x22 inches; Paper: PremierArt Platinum Rag 350gsm; Printer Name: Epson Stylus Pro 4900; Ink Used: Epson UltraChrome K3; Driver: Standard Epson Driver (Mac OS X); Camera: 4x5 Super 82 w/ a Leaf DCB1 Back; Lens: Sinaron Digital 60mm; F-stop: f/5.6; Exposure: 1/2 sec.

3

It's important to note that although many of the print sizes, printers, and papers listed in the captions represent actual prints from limited or open editions by guest artists in Chapters 9–16, in some cases the papers and printers noted by guest artists are suggested combinations based on their personal experiences. Similarly, most of the captions that accompany my images in Chapters 1–8 represent combinations of printers and papers that I've successfully tested or have seen in person but have not necessarily chosen to make available for sale as limited or open edition prints. This approach enabled me to include a wide variety of papers, canvases, and printers that I believe will be very helpful to others who are searching for combinations of high quality inkjet printers and media. To see the actual printers, papers, and print sizes I have chosen for many of my print editions, visit [www.andrewdarlow.com](http://www.andrewdarlow.com).

## Companion Web Site

The companion web site for this book can be found at [www.inkjettips.com](http://www.inkjettips.com). I've created it for a number of reasons. First, it contains hundreds of links to product information, articles, and other resources that are mentioned or specifically referenced in the book. For example, you will often see links inserted in a blog-like style throughout each chapter. To go to any link (for example [L4.3], visit [www.inkjettips.com](http://www.inkjettips.com) and select the chapter number from the "Book Links" area (Chapter 4 is circled in red, below). You will then see a chart with all the links for Chapter 4, as well as related links to more information and resources.



You'll also find new content on the companion site, including video tutorials. Due to the number of brands of inkjet printers and the complexity of many printer drivers and RIPs, the companion site will allow me to cover this information in greater detail. The site will also have a resources section with information on books, color management tools, and much more. Information on consulting, workshops, and exhibitions, as well as my free Inkjet and Imaging Tips Newsletter can also be found on the companion site.

Thank you for taking a look at Chapter 2 of 301 Inkjet Tips and Techniques.  
(see links below for related resources)

Visit the Book's Companion Site at [www.inkjettips.com](http://www.inkjettips.com)

Read Reviews on [Amazon.com](http://Amazon.com)

Visit Andrew Darlow's Photo Tips & News site at [www.imagingbuffet.com](http://www.imagingbuffet.com)

Andrew Darlow's in-person and phone consulting services