

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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ISBN-10: 1-59863-204-3

ISBN-13: 978-1-59863-204-0

Library of Congress Catalog Card Number: 2006927153

Printed in the United States of America

08 09 10 11 12 BU 10 9 8 7 6 5 4 3 2 1

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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)

# Acknowledgments

I'd like to first thank my wife Belinda, who has been my hero throughout the production of this book, and who has shared with me many of the best moments of my life, including the birth of our son, whose "ink footprints" grace the opening pages of the first chapter. My parents have had a tremendous influence on my life, and it's difficult to express how grateful I am for the opportunities they have given me, and for the many ways that they have brought art and culture into my life. My older brother Matthew has been not just a good friend (once we reached our teens), but he has set a strong, positive example for me in so many ways.

When I was 18 years old, the Ueno family invited me into their home in western Japan as an exchange student. It was an unforgettable experience that greatly influenced me in my decision to become a writer and photographer. I will always consider them a part of my family.

I've had the honor of working personally with many who have been advisers, mentors, and editors of publications. I thank the following people for sharing their knowledge and expertise in the areas of writing, publishing, printing, and photography: Brian Berk, Diane Berkenfeld, Katie Brennan, Michael Darlow, Sarah Coleman, Ken Crest, Val DiGiacinto, Jennifer Gidman, Marty Goldstein, Dan Havlik, Tina Kennedy, Lauren Locketto, Dan Margulis, Alice Miller, Joe Oppenheimer, Larry Padgett, Marianne Pardal, Elmo Sapwater, Kathy Schneider, Gregory Sharpless, Joan Sherwood, Michel Tcherevkoff, John Timem, Richard Veloso, Liz Vickers, Maria Wakem, and Lauren Wendle.

A special place in my heart will always be reserved for the staff and faculty at the International Center of Photography in New York, where I had the opportunity to learn from and share my passion for photography and inkjet printing with hundreds of students from around the world. Many thanks to Willis Hartshorn, Phillip Block, Suzanne Nicholas, h. eugene foster, Shauna Church, Adam Eidelberg, Donna Ruskin, and Nancy Sirkis.

I would be far less informed about many of the tips and techniques described in this book without the online discussion groups and forums that I've been reading and participating in for about the last 10 years. Thanks especially to Joe Nalven and John Shaw, who co-moderate with me the digital-fineart Yahoo!Groups list. I'd also like to thank the following authors and photographers for their work in helping to further my

knowledge of Photoshop, color management, digital asset management, photography, and fine art printing: Kevin Ames, Scott Bourne, Russell Brown, Dan Burkholder, John Paul Caponigro, Amadou Diallo, Katrin Eismann, Martin Evening, Robert Farber, Greg Gorman, Michael Grecco, Judy Herrmann, R. Mac Holbert, JD Jarvis, Stephen Johnson, Scott Kelby, Thomas Knoll, Julieanne Kost, Peter Krogh, Jay Maisel, Deke McClelland, Michael Reichmann, Seth Resnick, John Reuter, Andrew Rodney, David Saffir, Jeff Schewe, Michael Starke, Uwe Steinmueller, Derrick Story, Eddie Tapp, Vincent Versace, and the late Bruce Fraser.

Special thanks to executive editor Kevin Harreld and series editor Harald Johnson, both of whom inspired me to bring this book to life, and helped to guide me through much of the journey from initial outlines to finished layouts. And a huge thank you goes out to project editor Sandy Doell, who greatly helped to shape the book into its final form. Also thanks to Bill Hartman for an interior design that far exceeded my expectations, Mike Tanamachi for designing a book cover that I am very proud to have my name on, proofreader Melba Hopper, and indexer Katherine Stimson.

I wish I could list here the hundreds of people who represent the many hardware and software companies who have always been there to answer my questions and provide information when I was a magazine editor and throughout the production of this book. I also would like to thank the many photographers and other artists who I've interviewed over the years and who have shared with me and others their tips, techniques, and imagery.

This book would not have been possible if not for the research and dedication of many inkjet printer and media manufacturers over the past 20–30 years. Their engineers, chemists, beta testers, and users have worked extremely hard to help improve the quality of the printers, inks, papers, and other media that we see on the market today. I especially wish to recognize the people in the printer divisions at Canon, Epson, and HP, whose products I use and trust for virtually all of my own inkjet printing.

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.

# Contents

<i>Introduction</i> .....	<b>xxiii</b>
Who This Book Is For.....	xxiv
What Equipment You Need.....	xxiv
How This Book Is Organized.....	xxv
About the Book’s Images.....	xxv
Companion Web Site.....	xxvii

## Chapter 1

### **Getting Started.....1**

#### *Decide Whether Inkjet Is Right for You .....3*

TIP 1	Determine your budget for a printer or multiple printers.....	3
TIP 2	Figure in the added cost of ink and paper.....	3
TIP 3	Think about the number of prints you plan to make in an average month. ...	5
TIP 4	Decide how much control you want to have over your prints. ....	5
TIP 5	Determine your quality requirements. ....	5
TIP 6	Consider buying a color laser printer.....	5
TIP 7	Consider using a continuous-tone digital photo service. ....	7
TIP 8	Consider buying a dye-sublimation printer or using an outside print provider.....	9
TIP 9	Consider the amount of computer knowledge necessary to start printing your work.....	9
TIP 10	Think about the space necessary for a printer. ....	9
TIP 11	Consider how far the printer will be from the computer.....	9
TIP 12	Take into account your time.....	11

#### *Using Outside Printing Companies.....13*

TIP 13	Ask for a sample print. ....	13
TIP 14	Visit in person if possible. ....	13
TIP 15	Match your lighting.....	15
TIP 16	Buy a smaller version of a similar printer.....	15
TIP 17	Ask your printmaker to keep a sample of each approved image.....	17

## Chapter 2

### File Preparation: An Overview .....19

#### *Transforming Your Images from Pixels to Prints* .....21

TIP 18	Find appropriate imaging books and look for good magazine and web resources. ....	21
TIP 19	Learn the difference between DPI and PPI. ....	21
TIP 20	Learn about resolution and file dimensions. ....	23
TIP 21	Choose an appropriate resolution for your prints. ....	23
TIP 22	See how file sizes change as PPI increases in The Resolution Chart. ....	24
TIP 23	Use Photoshop as a Resolution Calculator. ....	25
TIP 24	Set your file size to its print size. ....	25
TIP 25	Calibrate and profile your monitor and printer, and print a standard calibration image. ....	27
TIP 26	Print a test at multiple resolutions and with different settings. ....	27
TIP 27	Take notes and change file names when necessary. ....	29
TIP 28	Interpolate in steps using Bicubic Smoother or Sharper. ....	31
TIP 29	Interpolate using special software. ....	31
TIP 30	Interpolate using the print and scan method. ....	32
TIP 31	Interpolate through the driver. ....	32
TIP 32	Know some sharpening history and Photoshop’s built-in options. ....	33
TIP 33	Sharpen with care and keep sharpening on a separate layer (or layers). ....	33
TIP 34	Try sharpening using other options. ....	35
TIP 35	Add noise in Photoshop to create film grain in your images. ....	37
TIP 36	Add or remove noise using other software options. ....	39
TIP 37	Save your layered file and flatten before printing. ....	39
TIP 38	Understand the benefits of working in 16-bit color or grayscale mode. ....	41
TIP 39	Consider printing from 16-bit files, especially with grayscale images. ....	41

## Chapter 3

### Choosing an Inkjet Printer .....43

#### *How to Choose Your Next Inkjet Printer* .....45

TIP 40	Fill out the InkjetSelector checklist. ....	47
TIP 41	Decide whether you want a printer with dye or pigment inks. ....	51

TIP 42	Consider a 4- or 5-inch-wide printer. ....	53
TIP 43	Consider an all-in-one printer. ....	54
TIP 44	Consider a mobile letter-sized printer.....	55
TIP 45	Consider a letter-sized dedicated photo printer.....	58
TIP 46	Consider the Epson Stylus Photo R1800. ....	58
TIP 47	Consider the Epson Stylus Photo R2400. ....	59
TIP 48	Consider the Epson Stylus Photo 1400. ....	62
TIP 49	Consider the HP Photosmart Pro B9180.....	63
TIP 50	Consider the Canon imagePROGRAF iPF5000. ....	65
TIP 51	Consider the Epson Stylus Pro 3800.....	67
TIP 52	Consider the Epson Stylus Pro 4800.....	69
TIP 53	Consider the Epson Stylus Pro 7800/9800. ....	70
TIP 54	Consider the HP Designjet 90/130. ....	73
TIP 55	Consider the HP Designjet Z3100. ....	74
TIP 56	Consider the HP Designjet Z2100. ....	76
TIP 57	Consider the Canon imagePROGRAF 8000/9000.....	79

## Chapter 4

### Color Management .....81

#### *Color Management Tips and Techniques .....83*

TIP 58	Understand drivers, RIPs, firmware, and plug-ins. ....	85
TIP 59	Understand the basics and benefits of color management. ....	87
TIP 60	Learn the difference between calibrating and profiling.....	89
TIP 61	Understand calibration, maintenance, and linearization.....	91
TIP 62	Set up, calibrate, and profile your display. ....	93
TIP 63	Use and install supplied printer profiles. ....	96
TIP 64	Have custom profiles made, or make your own. ....	97
TIP 65	Consider dry down time and the patch reading surface. ....	101
TIP 66	Soft proof and choose the right rendering intent for your work.....	102
TIP 67	Avoid double profiling.....	103
TIP 68	Decide which working space profiles to use.....	103
TIP 69	Learn about color gamuts and tools for mapping gamuts.....	106

**Chapter 5**  
**Black and White .....109**

*Black and White Tips and Techniques.....111*

TIP 70 Look at books and darkroom prints as a guide for color and density.....112  
TIP 71 Choose a color printer with multiple black and gray inks.....113  
TIP 72 Consider a dedicated black and white inkset. ....114  
TIP 73 Print with a single black ink only. ....115  
TIP 74 Optimize your color to black and white conversions and toning. ....117  
TIP 75 Consider a RIP for better black and white. ....122  
TIP 76 Buy a small printer and use it for proofing. ....124  
TIP 77 Use the gloss enhancer with compatible papers if available.....124  
TIP 78 Coat your prints to reduce bronzing and gloss differential. ....125  
TIP 79 Consider participating in a print exchange. ....125  
TIP 80 Visit trade shows and exhibitions.....127  
TIP 81 Find appropriate papers for black and white. ....129  
TIP 82 Control your midtones and shadows with specific tools. ....130  
TIP 83 Keep your lighting in mind. ....131

**Chapter 6**  
**Inkjet Paper, Canvas, and Coating .....133**

*Inkjet Substrate Selection and Usage .....135*

TIP 84 Do some research before buying paper or other substrates.....137  
TIP 85 Consider glossy/semi-gloss RC inkjet papers.....137  
TIP 86 Consider fiber gloss/semi-gloss inkjet papers. ....139  
TIP 87 Consider matte and watercolor inkjet papers.....141  
TIP 88 Consider matte, semi-gloss, or gloss canvas.....143  
TIP 89 Consider other substrates.....145  
TIP 90 Use a gloss enhancer/gloss optimizer on semi-gloss and gloss papers....147  
TIP 91 Decide whether to use sheets, rolls, or both.....149  
TIP 92 Use sprays or brush-on coating options. ....151  
TIP 93 Use inkjet-compatible labels for tracking, exhibitions, and more.....155

## Chapter 7 Portfolio and Presentation .....157

### *Portfolio and Presentation Options .....159*

TIP 94	Consider albums and portfolio books with plastic sleeves.....	162
TIP 95	Consider albums and portfolio books without plastic sleeves. ....	165
TIP 96	Consider a wire or plastic bound book.....	169
TIP 97	Make books using saddle stitching, ribbon bindings, or fasteners. ....	171
TIP 98	Choose good cutters and a self-healing mat.....	173
TIP 99	Use pre-cut mats or have mats custom cut.....	176
TIP 100	Find the right boxes, cases, and online resources.....	177
TIP 101	Mount your work on acrylic or other materials. ....	178
TIP 102	Frame it right and consider standard sizes. ....	181
TIP 103	Make your own custom business card/promo pieces.....	184

## Chapter 8 Specific Printer Tips and More .....189

### *Getting Specific.....191*

TIP 104	How to use compact photo printers more effectively.....	191
TIP 105	How to save ink with Epson Stylus Pro printers. ....	195
TIP 106	Pre-feed with any printer, and save time with the HP Designjet series printers.....	198
TIP 107	How to quickly tone black and white images and create compelling image effects. ....	204
TIP 108	How to uncurl roll or sheet paper. ....	206
TIP 109	Consider a printer stand, wall shelving, or organizer.....	209
TIP 110	Save ink and learn to save your print settings. ....	212
TIP 111	Place prints on paper prior to hanging on a wall.....	213
TIP 112	Decide whether you should keep your printer on. ....	215
TIP 113	Discover resources for scrapbooking and paper arts. ....	216
TIP 114	Donate or recycle your inkjet-related items.....	221

# Guest Artist Section

## Chapter 9

### **Inkjet Paper Tips .....225**

#### *Using Hahnemühle's Photo Rag and Other Coated Watercolor Papers .....227*

- TIP 115 Print with custom profiles and experiment. ....229
- TIP 116 Brush prior to printing to reduce "flaking." ....229
- TIP 117 Cut sheets from roll papers before printing. ....230
- TIP 118 Avoid using paper near the end of a roll. ....230
- TIP 119 Let the paper dry before packing or framing. ....230

#### *Using Crane's Museo Silver Rag.....231*

- TIP 120 Use an inkset with Photo Black. ....231
- TIP 121 Print using Epson's Advanced B&W Mode. ....233
- TIP 122 Handle Silver Rag with care and avoid rolling. ....233
- TIP 123 Dry mount and spray if appropriate.....234
- TIP 124 Take a look at Hahnemühle Fine Art Pearl.....234

#### *Printing on Uncoated Fine Art Papers .....235*

- TIP 125 Choose the right art paper(s) for your work.....235
- TIP 126 Do your own fade testing. ....236
- TIP 127 Profile and choose the right paper settings.....236
- TIP 128 Hang your rolls and vacuum your paper. ....237
- TIP 129 Send paper through twice for a stronger black. ....239
- TIP 130 Take special steps when printing with deckled edges.....242

#### *Displaying Work Using Posterhängers.....243*

- TIP 131 Use multiple Posterhängers to hold a series of tiled prints. ....243

#### *Achieving Saturated Color on Art Papers.....247*

- TIP 132 Choose a wide gamut RGB space when converting.....247
- TIP 133 Use custom profiles and softproof.....249
- TIP 134 Choose the right paper or other media.....249

## Chapter 10

### Art Reproduction, Canvas, and Finishing .....251

#### *Art Reproduction: Image Capture and Color Management.....253*

TIP 135 Use quality targets when capturing artwork. ....254

TIP 136 Use appropriate lighting and light the art evenly. ....255

TIP 137 After capture, move images through the workflow in the same color space. ....256

TIP 138 Adjust the colors in the reproduction file using Photoshop and ColorPicker.....257

TIP 139 Use a high quality device to produce custom canvas and paper profiles. ....258

#### *Printing on and Coating Canvas .....259*

TIP 140 Choose good quality materials from reliable media suppliers. ....259

TIP 141 Allow excess border on canvas.....261

TIP 142 Apply a protective coating and hang the canvas while spraying. ....261

TIP 143 Keep your coating equipment clean. ....263

#### *Choosing and Coating Inkjet-Compatible Materials .....265*

TIP 144 Choose the right media for the job and be aware of “flaking.” .....265

TIP 145 Find a good quality lacquer spray for works on paper. ....266

TIP 146 Print on fabrics and silk for a unique look.....267

#### *Techniques for Hand Coating Canvas.....271*

TIP 147 Choose quality materials and consider canvas shrinkage.....271

TIP 148 Tape the canvas, then mix and apply the coating. ....273

## Chapter 11

### Portfolio and Marketing Tips .....275

#### *Web Site, Portfolio, and Marketing Tips.....277*

TIP 149 Create a web site.....277

TIP 150 Have an exhibition catalog/brochure produced.....278

TIP 151 Keep your prints covered. ....281

TIP 152 Protect your work in a high quality case.....281

TIP 153 Protect your work for shipping. ....282  
TIP 154 Build or buy flat files for your prints.....283  
TIP 155 Create a boxed portfolio of prints. ....283

***Creating a Commercial Portfolio with Inkjet Prints .....287***

TIP 156 Choose a look and feel for your book and make multiple copies. ....287  
TIP 157 Select, scan, and make digital contacts of new and old work. ....289  
TIP 158 Work with a good designer and prep an online gallery.....289  
TIP 159 Use a bulletin board and carefully consider image placement.....291  
TIP 160 Assemble low-resolution composite files. ....293  
TIP 161 Scan, retouch, print, and insert.....293

***Making Innovative Promos and Portfolios .....295***

TIP 162 Find a designer to work with. ....295  
TIP 163 Create small files for the designer to use for layout. ....298  
TIP 164 Replace the low-res files and start printing.....299  
TIP 165 Choose a book type. ....299  
TIP 166 Cut/score properly and find cover materials. ....301  
TIP 167 Make a Z-fold promo piece. ....303  
TIP 168 Make folding cards and postcards.....304

***Making an Advertising Portfolio with Double-Sided Inkjet Paper .....305***

TIP 169 Choose a printer and paper.....305  
TIP 170 Calibrate and profile and consider ImagePrint.....307  
TIP 171 Make a full comp of the book.....307  
TIP 172 Make test prints on less expensive paper.....309  
TIP 173 Cut down your sheets before printing.....309  
TIP 174 Make a template for your pages.....311  
TIP 175 Print on both sides of the sheets, and spray prints to protect them. ....312  
TIP 176 Choose a good book binder and have a few made.....312

<b>Chapter 12</b>	
<b>RIPs, B&amp;W, and Color Management.....</b>	<b>315</b>
<i>Using Qimage for Standard and Panoramic Printing.....</i>	<i>317</i>
TIP 177 Check your image carefully before printing.....	318
TIP 178 If you want a border, add white space.....	318
TIP 179 Set up the Windows printer driver.....	319
TIP 180 Select your monitor and printer profiles correctly.....	320
TIP 181 Set your print size to be equal to your paper width.....	321
TIP 182 Select your interpolation options and print.....	323
<i>Printing with the ColorBurst RIP.....</i>	<i>325</i>
TIP 183 Choose the right version for your needs.....	325
TIP 184 Linearize for best results.....	327
TIP 185 Make custom profiles with Environments.....	329
TIP 186 Enter the correct quality/paper settings.....	331
TIP 187 Choose your input and output profiles.....	331
TIP 188 Flatten file in Photoshop, save, and print.....	332
<i>Printing with the ImagePrint RIP.....</i>	<i>335</i>
TIP 189 Make sure your monitor is calibrated and profiled.....	335
TIP 190 Prep your files for printing.....	335
TIP 191 Use ImagePrint’s layout window and print queue.....	337
TIP 192 Use ImagePrint’s built-in profiles.....	339
TIP 193 Choose the right paper and consider the “Phatte Black” option.....	340
<i>Printing with the StudioPrint RIP.....</i>	<i>341</i>
TIP 194 Choose your layout, and print wide.....	341
TIP 195 Linearize for optimum results.....	343
TIP 196 Customize your inkset for monochrome printing.....	343
TIP 197 Find the right speed and dithering settings.....	345
<i>Using Inkjet Printers as CMYK Proofs.....</i>	<i>347</i>
TIP 198 Choose your equipment; then calibrate and profile.....	347
TIP 199 Communicate with the printer and “proof to their proof.”.....	349
TIP 200 Convert to CMYK and create your own proofs.....	352

## **Chapter 13** **Exhibitions, Editioning, and Image Tracking .....355**

### *Exhibition Tips and Techniques.....357*

- TIP 201 Draw out your exhibition plan. ....357
- TIP 202 Photograph your exhibitions. ....359
- TIP 203 Explore new print options.....359
- TIP 204 Consider alternative display options. ....360

### *Organizing, Tracking, and Documenting Limited Editions .....361*

- TIP 205 Import your images.....361
- TIP 206 Organize your images.....363
- TIP 207 Create galleries for specific projects.....363
- TIP 208 Create custom fields and use online resources. ....364
- TIP 209 Create Smart Galleries to help with searches. ....365
- TIP 210 Choose additional custom fields. ....367
- TIP 211 Document limited editions correctly.....367
- TIP 212 Check the laws for limited editions in your place of business. ....370

### *File Naming, Image Tracking, and Backup.....371*

- TIP 213 Name folders and files consistently throughout the process.....371
- TIP 214 Use Adobe Bridge to add image information...and consider other applications.....371
- TIP 215 Have a good data backup plan. ....375
- TIP 216 Build a public and/or private web site.....377

## **Chapter 14** **Packing, Lighting, and Framing.....379**

### *Lighting for Exhibitions and Proofing .....381*

- TIP 217 Choose a high quality viewing system.....381
- TIP 218 Choose the right bulbs for your home, studio, or exhibitions.....382

### *Protecting, Framing, and Packing Your Work .....385*

- TIP 219 How to reduce print outgassing. ....385
- TIP 220 Keep it simple when choosing frames. ....387

TIP 221 Mount prints and display them in different ways.....389  
 TIP 222 Choose a good utility knife.....391  
 TIP 223 Use padded envelopes for protecting frames.....391  
 TIP 224 Use book boxes and thin foam.....394  
 TIP 225 Use quadruple-wall corrugated to protect art and glass.....394  
 TIP 226 Create a strong hanging system for mounted work.....395  
 TIP 227 Use Bubble Wrap and stretch wrap film.....396  
 TIP 228 Choose the right glass or acrylic for your projects.....396

***Lighting a Space Effectively and Efficiently.....399***

TIP 229 Determine how many pieces you will put on each wall.....399  
 TIP 230 Choose a good quality lighting system.....402  
 TIP 231 Check with your local or state government to see if incentive programs exist.....402  
 TIP 232 Mix halogen with fluorescent (or LED) lighting.....402  
 TIP 233 Have a plan for lighting at night.....405  
 TIP 234 Protect fragile artwork.....405

**Chapter 15**

**Unique Art Applications.....407**

***Using inkAID to Precoat Nonporous Surfaces for Printing .....409***

TIP 235 Check your printer for “pizza wheels.” .....409  
 TIP 236 Check the head clearance of your printer and set the platen gap to an appropriate width.....411  
 TIP 237 Check to see if your printer has a straight paper path.....412  
 TIP 238 Choose unusual, commercially available substrates.....412  
 TIP 239 Clean the surface, precoat, and let dry.....412  
 TIP 240 Print a test image using standard or custom profiles.....413  
 TIP 241 Use Photo Black ink and a high quality setting.....413  
 TIP 242 Use nonwoven fabric to create a unique surface upon which to print.....413  
 TIP 243 Prepare the fabric correctly for printing.....413  
 TIP 244 Wrap your nonwoven “canvas” around the edges of your stretcher bars.....413  
 TIP 245 Mix precoats for interesting results.....415

***Making 3D Stereo Cards with an Inkjet Printer .....417***

- TIP 246 Buy a special lens for capturing stereoscopic images. ....417
- TIP 247 Place the camera on a tripod or shoot in bright sunlight. ....419
- TIP 248 Download, color correct, and adjust the image. ....419
- TIP 249 Print the stereo images on glossy paper.....421
- TIP 250 View the print with a stereoscopic viewer.....422

***Creating and Hanging Irregularly Shaped Art Pieces.....423***

- TIP 251 Choose appropriate printers and papers. ....423
- TIP 252 Print and coat the work.....425
- TIP 253 Mount artwork to a board and cut carefully. ....427
- TIP 254 Raise artwork by mounting to a second board.....427
- TIP 255 Attach a support backing and mount the work. ....427
- TIP 256 Hang using quality picture wire and hooks.....428

***A Close-Up Look at Lenticular Imaging .....429***

- TIP 257 Learn about lenticular imaging and find companies that specialize in it. ....429
- TIP 258 Create the lenticular image and use software to “interlace” the images. ....431
- TIP 259 Print the image on glossy paper and carefully align to the lens.....431

***Printing on Uncoated Papers Using inkAID Coatings .....433***

- TIP 260 Look for interesting surface textures.....433
- TIP 261 Use papers that work well with the inkAID precoat.....433
- TIP 262 Apply inkAID carefully and consider “pizza wheels.” .....433
- TIP 263 Apply inkAID in a more random way for different results. ....435
- TIP 264 Flatten papers after coating to avoid printhead strikes on the print. ....436
- TIP 265 Iron your paper if the curl is severe. ....436
- TIP 266 Trick your printer into seeing the black paper. ....436

***How to Print Over Deckled Edges.....437***

- TIP 267 Prepare your paper for printing and do a test.....437
- TIP 268 Prepare your carrier sheet.....437
- TIP 269 Prepare your image and carrier sheet for printing.....437

TIP 270	Mark the carrier sheet to help in positioning your deckled paper.....	438
TIP 271	Attach your paper to the carrier sheet.....	438
TIP 272	Print using the same settings as your tests.....	439
TIP 273	Remove print from the carrier sheet and display!.....	439

## Chapter 16

### **Additional Tips and Print Permanence.....441**

#### *Creating an Exhibition Scale Model.....443*

TIP 274	Obtain a floor plan or measure the space.....	443
TIP 275	Determine the scale of your model.....	444
TIP 276	Print the images for the scale model.....	444
TIP 277	Make the scale model.....	445
TIP 278	Hang the work, using the scale model or detailed floor plan.....	446

#### *Creating a Digital Composite .....447*

TIP 279	Start with good quality photographs from a few angles.....	447
TIP 280	Determine scale by replacing existing art.....	447
TIP 281	Look at existing lighting to create shadows and reflections.....	449

#### *Creating a Magnetic Wall for Print Viewing.....451*

TIP 282	Find appropriate sheet metal.....	451
TIP 283	Affix the metal to a wall.....	451
TIP 284	Cover the metal with paper or paint.....	451
TIP 285	Use good quality magnets.....	453

#### *Windows Printing and the Epson Stylus Photo R1800 .....457*

TIP 286	Download driver and add profiles.....	457
TIP 287	Soft proof, make any adjustments, and print.....	459

#### *Printing on CDs and DVDs .....461*

TIP 288	Choose appropriate CDs/DVDs.....	461
TIP 289	Set up your file for printing.....	463
TIP 290	Print using the correct driver option.....	465
TIP 291	Load the holder consistently.....	465
TIP 292	Try different media settings.....	465

***Better Printmaking* .....467**  
TIP 293 Adopt a non-destructive workflow.....467  
TIP 294 Watch your image alignment.....467  
TIP 295 Enhance mid-tone contrast.....469  
TIP 296 Sharpen properly.....471  
TIP 297 Use the Notes tool in Photoshop. ....471  
TIP 298 Annotate your printed proofs and files.....472

***Doing Your Own Print Permanence Testing*.....473**  
TIP 299 Organize your equipment and choose an image. ....473  
TIP 300 Set up the test conditions, print your samples, and begin the test.....475  
TIP 301 Make your evaluations over time, and complete the test. ....477

***“Alphabet Soup” and Standard Cut Paper Sizes*.....478**

**Index.....480**

# 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 Started

## 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

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