

Daniel J. Cox/Natural Exposures Inc.

Wildlife photographer builds fine art print business using HP photo printers



“The new Z3200 printer has a wider gamut in the reds. In a recent test, it produced the fall colors of the tundra in a way that makes you feel you’re there, staring at them in the wild. It really produces beautiful reds.”

—Daniel J. Cox, Photographer and Owner of Natural Exposures Inc.



HP customer case study: Natural history photographer Daniel J. Cox takes charge of printing his own images using HP photo printers

Industry:
Photographic fine art

Objective:

Find an alternative to using remote professional photo labs to produce photo-quality fine art prints that matches or exceeds lab quality, lowers costs, and improves customer service

Approach:

Daniel J. Cox’s company, Natural Exposures Inc., has installed an HP Designjet Z Series Photo Printer

IT improvements:

- Built-in spectrophotometer enables creation of custom output profiles for any print media
- HP Pro Print plug-in for Adobe® Photoshop® ensures consistency and boosts productivity

Business benefits:

- Low production costs
- Consistent results over time, regardless of print media used
- Superb longevity, with fade resistance rated at more than 200 years by an independent laboratory



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After some 28 years as a professional wildlife photographer, Daniel J. Cox is getting the opportunity to do something he’s always wanted: document the work of scientists involved in habitat preservation and saving endangered species. As part of that work, he’s producing limited edition posters on behalf of Polar Bears International using HP Designjet Z Series Photos Printers.

“The color, the richness and detail we can produce using HP Designjet Z Series Photo Printers is just

Customer solution at a glance

Primary applications

Fine art and commercial photo printing

Primary hardware

- HP Designjet Z3100 Photo Printer
- HP Designjet Z3200 Photo Printer
- HP Photosmart B9180 Photo printer
- HP Indigo 5500 Digital Press
- Scitex TJ8500 UV inkjet printer

Primary software

- HP Pro Print plug-in for Adobe Photoshop

HP Supplies for Photo Printers

- HP Vivera pigment inks
- HP Photo Imaging Satin Paper
- HP Artist Matte Canvas
- HP Hahnemühle Watercolor Paper

phenomenal," he says. "We have complete control over every aspect of printing, we're more productive than ever, and we have brought our print costs down compared to using professional labs."

Cox has been using the Designjet Z3100 printer to produce large format fine art prints of his work by Natural Exposures Inc. for exhibition and sale for more than a year. More recently, many of his images for Polar Bears International were exhibited at major trade shows.

Career begins anew

Cox began his photographic career hoping to specialize in documenting scientists working with endangered species. "But I learned quickly there wasn't big interest in pictures of people working with animals. People want to see the animals themselves." So he began shooting wildlife images for stock photo agencies, along with occasional assignments for *National Geographic* and *Time* magazine and others.

"The prints from the Z3200 printer look better than ever."

Daniel J. Cox, Photographer and Owner of Natural Exposures Inc.

In the past few years, the renewal of interest in environmental and climatological issues has created a new opportunity for him. "People are becoming more aware of how our actions as humans will affect our ability—and that of other species—to live and thrive. So I went back to what I started doing as a natural history photographer, and it's been very rewarding."

He began printing his own images just a few years ago. Like most professional photographers, Cox had long depended on professional labs to print his work. When photographic-quality inkjet printing emerged, he became interested very quickly. "But what I was hearing early on was that prints typically wouldn't last more than six months. So I waited until the technology advanced to provide greater longevity. When I heard that HP printers were able to produce prints with a life in the 80-year range, I decided this was getting interesting."

He began working with the HP Designjet 130 Photo Printer to produce prints up to 24 inches wide, and then moved to the Designjet Z3100 Photo Printer when it became available, enabling him to print up to 44 inches wide. The Z3100, and now the Z3200 printer, also employ more color management tools to improve color fidelity. Case in point: a built-in spectrophotometer,* allowing Cox to develop custom



A preservation scientist researches a sleeping polar bear.

ICC color profiles for each type of paper on which he prints.

"Having profiles for each type of paper means we can zero in on a look on the monitor and count on the print looking virtually identical—first time, every time," Cox says. "It cuts way down on the need for test prints, so we're not wasting time and money in our quest to make the perfect fine art print."

The 12-ink system of HP Vivera inks not only produces prints with incredible depth and color accuracy, but also has been rated to resist fading for more than 200 years.** The Z3200's ink system includes a new HP Chromatic Red ink which provides an expanded gamut.

"The new Z3200 printer has a wider gamut in the reds. In a recent test, it produced the fall colors of the tundra in a way that makes you feel you're there, staring at them in the wild. It really produces beautiful reds," he says. "The prints from the Z3200 printer look better than ever."

The Z3200 printer also offers operational efficiency and ease of use. More efficient ink usage is due to Optical Drop Detection that helps prevent clogging in ink nozzles. Optimized performance, maximized printhead life, and great ink efficiency are achieved with proactive automatic servicing routines*** with exceptional gloss uniformity and minimized bronzing on most glossy photo papers with HP Gloss Enhancer.****

*Embedded in this HP Designjet Photo Printer is an I1 spectrophotometer from Xrite. Close collaboration between HP and Xrite ensures a reliable solution that's been thoroughly tested to meet customer demands for ease, quality and dependability. **Image permanence estimates by HP Image Permanence Lab based on testing on a range of HP photo, fine art, and specialty papers: confirmation tests in progress at Wilhelm Imaging Research, Inc. For details, see www.hp.com/go/supplies/printpermanence. ***Based on internal HP testing, the HP Designjet Z3200 Photo Printer series utilizes at 30 percent less ink during routine maintenance operations versus select printers from other vendors. ****Bronzing is minimized as an image-quality issue when HP Gloss Enhancer is used. HP Gloss Enhancer can be used on photo paper, with the exception of matte-finish papers.

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HP Designjet printers make fine art prints viable for business

Cox says there has always been demand for framed prints of his images, but in the past, he filled those orders reluctantly. “We’ve always sold prints, but I used to really dislike it. There was so much labor and time involved working with a professional lab in another city, and getting a quality print. It wasn’t very profitable—you might have \$50 invested in a final print, and we would only charge \$60. But digital imaging and HP printing technology have changed that entirely.”

With the ability to make prints right in his studio, Cox says his costs have come down dramatically. “We’re actually able to charge a reasonable price and make money,” he says.

“Once you’re set up and your computer and monitor are calibrated, it’s just a breeze. With the HP Designjet Z Series Photo Printer, we’re producing super high-quality results for a fraction of the price we were paying a professional lab in the past.”

Daniel J. Cox, Photographer and Owner of Natural Exposures Inc.

His wife and staff help to manage the print business. If the first print they make doesn’t meet his standards, a simple change at the computer generally is a quick fix. “There are definite advantages to doing it all yourself,” he says. “Once you’re set up and your computer and monitor are calibrated, it’s just a breeze. With the HP Designjet Z Series Photo Printers, we’re producing super high-quality results for a fraction of the price we were paying a professional lab in the past.” Cox estimates his cost for a 16- x 20-inch print at under \$10.

When he first began printing in-house, Cox says his goal was to produce pristine, high-gloss images reminiscent of Cibachrome prints. But having explored the wide range of print media available for use on HP Designjet Z Series Photo Printers (including more than 50 different HP media), he has now standardized on HP Photo Satin Imaging paper for nearly all his work. “It gives us what I consider a traditional photographic look,” he says. But he also prints on HP Artist Matte Canvas and HP Hahnemühle Watercolor papers. And thanks to the custom profiles he produces, prints come out with the same density and color balance on every type of media.

Another hallmark of his HP Designjet Z Series Photo Printer: consistency. “We just finished a project for Polar Bears International. Altogether we ran 650 24- x 36-inch prints. And out of the entire run, we discarded just a couple of prints that were done on a roll of paper that had been sitting on the printer too long.”

Cox uses the HP Pro Print plug-in for Adobe Photoshop to ensure consistency. Consistency is important to a photographer who knows exactly what he wants each image to look like, each time it’s produced. But it also has important ramifications for the business he runs. “When you’re printing a 24- x 36-inch print, and one goes wrong, that’s a big chunk of paper and ink that



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you've wasted. One of the things that's impressed me about HP is not just the overall performance of the printers, but the dedication of their design and manufacturing teams to making things right."

In addition to HP Designjet large-format printers, Cox also uses the HP Photosmart B9180 Photo Printer to produce small presentations for magazine editors, and "leave behind" prints for contacts who facilitate his travel and location work.

HP collaborated with Cox to showcase his captivating imagery at the 2008 Photo Plus Expo in New York. His fine art images were printed on an HP Designjet Z3200. Backlit displays and a poster, intended to bring Cox's and PBI's efforts to life for event goers, were printed on a Scitex TJ8500 UV inkjet printer and HP Designjet Z6100, respectively. And, the HP Indigo 5500 Digital Press was used to create high-quality photo books with the exact same colors as his fine art prints.

HP Indigo digital presses: a new model for short-run book printing

Cox is also excited about his new book produced on HP Indigo 5500 Digital Presses. "I'm personally convinced it should be the future of printing photo books," he says. After doing 10 photo books with traditional publishers, he says, "There's nothing more disappointing than putting a lot of time and effort into a book project, and seeing a publisher do nothing to promote it."

Publishers just make their best guess at the market for a photo book, he says, and if they guess wrong, hundreds or thousands of books are remaindered for a few dollars each, and the extras are relegated to landfill.

Cox appreciates the print quality and environmental benefits of HP Indigo digital presses, including how on-demand printing reduces the amount of overruns and wasted prints.

With HP Indigo technology, on the other hand, books can literally be printed to order—one at a time. "I would love to see production on HP Indigo digital

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presses become the standard. Why not let people make a decision and we can say, 'We'll make one of these for you, but only if you want it!' And we won't have to cut down thousands of trees to make books that no one will buy."

"I would love to see photo book production on HP Indigo digital presses become the standard."

Daniel J. Cox, Photographer and Owner of Natural Exposures Inc.

HP Indigo digital presses are already the backbone of several publish-on-demand businesses, including a custom publishing service of Amazon.com. And the quality is without peer in the digital realm, Cox says. "The quality of HP Indigo digital printing I've seen was certainly equal to or better than any traditional books I've done in the past. We're creating a book on the arctic on HP Indigo digital presses for an upcoming trade show and I'm excited to see the results."

Looking ahead, Cox anticipates opening a gallery in Bozeman, Mont., featuring his work. At that point, his HP Designjet Z Series Photo Printers will literally become the manufacturing machine for his business. "With HP Designjet Z Series Photo Printers, not only can we produce gallery prints with breathtaking impact, but we can do it consistently, reliably and profitably, knowing that the buyer will have a product that lasts for generations to come."

To learn more, visit www.hp.com

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