

# Workflow

## MANAGING YOUR POST-PRODUCTION WORKFLOW



One of the great advantages of digital photography is that it doesn't cost you anything to shoot. Because your storage media is reusable and because there's no expensive chemical process, you can shoot for free, making it easy to practice and experiment. The freedom to practice will do more to improve your photographic skill than anything else. However, all that practice and experimentation can also mean that you'll soon find yourself mired in a huge number of images. Managing the editing, output, and long-term storage of all these files can be daunting, but you can employ a few strategies to ease your workflow.

Digital photography workflow is a huge topic, one that could easily fill an entire book of this size. So although I can't go into an in-depth discussion of all the possible solutions, this chapter will offer an overview of the workflow issues you'll face, as well as some tips on how to solve them.

## What Is a Workflow?

Film photographers never really used the term *workflow* because it's a concept that has arisen with the digital processing of different types of data. *Workflow* simply refers to the different steps—and the accompanying pieces of software—that you take to get your images from your camera and put them through whatever processes they might require to get to final output. This can include raw conversion, image editing, tagging with metadata, organization, and more, while output can be print, email, web delivery, or all of the above.

A workflow is intended to solve the following questions:

- Of the images that you just shot, which ones are the “keepers”?
- What kind of edits and adjustments, if any, need to be applied to those keeper images to turn them into the final image that you envisioned?
- What kind of output do you need, and how will it be created?
- Will you catalog these images in any way so that you can easily find and sort them later?
- How will you back up the images so that you're protected in the event of drive crash or physical disaster?

With a well-designed workflow, you'll be able to easily identify, correct, and output the images you like. Just as importantly, you'll be doing all of this in a way that makes your long-term management of your growing image library as simple and effective as possible, without overwhelming you with images.

## Making Selects

In this book, I talked about the fallacy of the notion that a “good” photographer shoots only good images. Even the best photographer has a high ratio of rejects to keepers. If you come back with 50 shots and you like 10 of them, you're doing very well.

Wading through those 50 to find the keepers is the first part of your workflow. There are lots of different ways to sort through your images, but the easiest is to

use some kind of browser software that provides a ratings mechanism. ViewNX, the browser software included on the Nikon Software Suite Disk, allows you to add star ratings to your images.

With a system like this, you can look through your images, rate the ones you like, then pass those select images on to another program for editing.

Other browsers, such as Adobe Bridge, the Photoshop Elements Organizer (Windows only), Lightroom, and iPhoto or Aperture (Mac only), and many other products provide similar functionality.

What are you looking for when you make your selects? Obviously, if you have a burst of similar shots, you're looking for the one you like best. This might be one with slightly better composition or where your subject has a better expression. If you have a bunch of similar images, then it may come down to whether one has better focus than another. You'll also look at exposure. Are some images over- or underexposed? Do some have a better range of contrast? Will some require more editing than others? All of these are reasons to select one image over another when making your selects.

**TIP:** Save Time and Hassle by Working on Images You Care About

It's important to make your selects first, because image editing and adjustment takes time, as does printing. You don't want to waste time editing images that ultimately you decide you aren't interested in. Also, making selects early can quickly relieve the glut problem, if you tend to shoot a lot of images.

As for what to do with the rejects, several schools of thought exist. Some photographers say you should never throw *anything* away because you never know what circumstances might come up later that can be resolved only with one of your reject images.

Other photographers say there's no need to waste space with images that you don't need, so as soon as you make your selects, delete the rejects. This will save space and keep you from having to manage and hassle with images that you'll never use.

I tend to fall somewhere in between. I delete the images that are blatantly bad—lens cap shots, shots with fingers in them, shots that are wildly out of focus—and keep some of the ones that are decent but not good enough to be chosen as selects. But I don't keep everything. There are some shots that I know I simply don't like and will never have any use for. Because I can assign ratings in a browser,

once I've made my selects, I don't have to be bothered with the rejects, but I've still got them if I need them. Also, don't get too attached to images you've already shot, because you can always go shoot more.

#### **TIP:** Making Selects While Importing

In the book, when I discussed importing, we looked at a few programs that let you choose which images you want to import from your media card. If you're of the "I'm not gonna keep any images that aren't selects" school then your importing step will be an important stage in your workflow. Although there's nothing wrong with this approach, most import programs that let you preview images don't necessarily provide you with a way to zoom in to check focus or get a better view, which can make it difficult to determine exactly which shot is the best.

#### **REMINDER:** Organizing Your Selects

In Chapter 4, I discussed file organization and naming strategies. If you skipped that section, it's worth taking a look at now.

## Editing and Adjusting

Once you've chosen the images you like, you're ready to start the image-editing portion of your workflow. Image editing is a huge topic, and I won't go into it here—there are plenty of books dedicated to that subject. But, to give you an overview, this is the stage where you will correct contrast and color problems, retouch to remove things like stray hairs or sensor dust, and apply sharpening, if needed. This is also where you might apply more complex edits such as special-effects adjustments, collage and compositing effects, and extreme retouchings.

There are lots of image-editing programs out there, with Photoshop being the granddaddy of them all. Photoshop has been around the longest, and many standard image-editing conventions and interfaces were originally invented by Adobe in the early versions of Photoshop.

At \$80–100, Photoshop Elements is just about the best photography-related deal out there, and it will provide all of the editing power that you'll need for years—possibly ever.

The word “Photoshop” has become synonymous with image editing, to the point where it’s now used as a verb. Usually when people talk about editing, though, they mean extreme, special-effects editing. “I’ll just Photoshop the Empire State Building in behind you.” In the real world, though, you’ll rarely perform such edits.

The majority of the image edits you’ll make will be cropping and tone and color corrections, and, if they’re done well, no one will say, “Oh, I see you Photoshopped that picture.”

If you (or the D90) calculate an exposure that’s correct, then your image might not need any edits at all. At other times, exposure miscalculations might force you to perform some adjustments. There might be other situations where the image you have in mind simply can’t be achieved without edits.

Image editing is not necessary to make a great picture, and of course plenty of great pictures were created *with* editing. Image editing should be viewed simply as another tool in your photography kit that you can use when needed.

## Output

There are many ways to show your pictures to other people. You can email them copies, post them to your website, upload them to a photo-sharing site like Flickr, show them as a slide show on your computer, or, of course, print them at anywhere from wallet size to poster size. For many images, you might want to do several of these things—post them online *and* print them, for example.

There are a few things you have to do before you can output to a particular medium, and most of these involve your image editor. Your primary concern will be the size of your image. The D90 creates 12-megapixel images with huge pixel dimensions. Before you post these to a website or email one to a friend, you’ll probably want to resize them so that they have smaller dimensions (unless you need to send the full-res image to someone so that they can print or edit it).

Your image-editing program should have a resizing feature and might even have an option for automatically converting the image to a size that’s appropriate for email and attaching to a message in your email program.

Similarly, your image might need to be resized for printing, depending on the needs of your printer and the size you want to print it at. Be aware, too, that if you’re printing, your image may need additional adjustments, because different printers have different color characteristics. Getting the best print out of a particular printer can sometimes require some additional adjustments on top of the ones you initially made.

Your image-editing program should have more information on printing, while your printer manual might provide you with some tips on image size and color settings.

Whether you're working with JPEG or raw files, after you've adjusted and edited the image, you'll need to save the results. Although you can save in JPEG mode to save space, it's better to save in a lossless mode, such as TIFF or Photoshop format, to preserve as much image quality and editability as you can.

## Tagging and Cataloging

Over the years, as you shoot more and more images, the task of finding a particular shot can become more complicated. Fortunately, there are image-cataloging programs that make long-term archiving and management of a complex library much easier.

If you're using Adobe Photoshop Lightroom, Apple Aperture, or Apple iPhoto, then you already have cataloging features, because those programs all contain built-in library management functions that are intended to help you maintain a library over the long haul.

If you're using Photoshop or another image-editing program that lacks built-in library management, then you'll want to consider a dedicated image-cataloging application, such as Microsoft Expression Media or Extensis Portfolio. My personal favorite is Expression Media, but both programs are very good and provide everything you'd want in a library application.

These programs allow you to create a library document and drag images into it. Both programs create thumbnails of your images and store them in the library document. All of the metadata in the image is stored in the library as well, and both programs provide you with a facility for editing metadata and keywords.

Later, you can search your library by filename, metadata, keyword, and more, making it simple to find images. What's more, these programs can catalog images that are no longer stored on your hard drive. So, for example, if you burn images to a recordable DVD, you can then catalog that DVD in your library. Later, if you're browsing and decide you want to work with an image that's on that DVD, the program will tell you the exact name of the disk.

Whether you use a dedicated cataloging application or a program with a built-in cataloging feature, your long-term searching and organization will be easier if you're diligent about applying meaningful keywords to your images. There are

no right or wrong keywords, as long as they make sense to you. So, you might use geographic locations, people's names, or "exterior" or "night" or any other descriptive term that you think might make searching easier later. Fortunately, all of the programs mentioned here make it easy to simultaneously apply keywords to entire groups of images.

Importing applications often let you add keywords and other metadata, such as copyright information, to your images as they are copied from your media card. This can give you a head start on your metadata chores and is often a great way to get your workflow started. Some people prefer to tag at the beginning of their workflow, some prefer to save it till last, and some mix it up, adding keywords to images as they make selects and perform edits. There's no best way, and depending on the software you use, some strategies may be easier than others.

#### TIP: Geotagging

*Geotagging* is the process of tagging your images with latitude and longitude metadata so that you can search for images based on where they were shot. There's dedicated geotagging software, and services like Flickr and Google Earth provide geotagging features that let you see thumbnails of your images superimposed on a map. You can even attach the Nikon GP-1 GPS unit to the D90, and it will automatically geotag your images for you.

## Backing Up and Archiving

Although these two processes are very similar, I look at them as having an important difference. *Backing up* is what you do while you're working on an image (or set of images) and don't want to lose your work. For example, if you've been spending days sorting through a big shoot, making selects, and performing some image editing, but you still have a ways to go before the project is finished, then you should back up so that if you have a crash or accidentally delete something, you won't lose too much work.

When you're done with the project, then you'll want to archive it. *Archiving* is kind of like backup in that you usually create a few copies to guard against media corruption, but archiving is also important because there may not be enough space on your computer's hard drive to keep every project and image that you have.

I have a single hard drive that I keep all of my images on while I'm working on them. The easiest way for me to back it up is to just use a second hard drive

of the same size. I use progressive backup software, which copies only files that have changed since the last backup, so backing up regularly does not take a huge amount of time.

You can also archive to hard drives, though this will be a fairly expensive way to archive. Also, at least once a year you'll want to check the integrity of your backup drives, because drives can degrade even sitting on a shelf, simply from the effects of gravity.

For long-term archiving, I use recordable DVDs. I make two or three dupes of each, and to keep them all organized using Microsoft Expression Media so that I can find images on them whenever I need to do so.

No one knows for sure how long recordable disks will last, but I have some recordable CDs that are approaching 15 years old and are still readable.

Ironically, the best long-term storage for your digital images may be the old-fashioned way: printing. You can currently get a \$500 desktop printer that can produce prints that should last around 200 years without visible color change or shift.

Finally, if you are diligent about making backups, don't forget to put some of them in an off-site location. One advantage that digital has over film is that it's nearly effortless to make perfect copies. So, there's no reason not to throw some optical disks or a hard drive in a safe deposit box, just to ensure that your family photos or professional archive is safe.

## Tip of the Iceberg

As I mentioned, there's hardly room in this book for a detailed discussion of workflow strategy and technique. In fact, I fully expect that all that these pages have done is put more questions into your head. That's a good thing, though, because understanding the problem and the issues as well as the options available will make it easier for you to find solutions and begin to construct a workflow that's right for you.