Setting up a Photo Database

Keeping track of your images is important...and not all that difficult

by Jack & Sue Drafahl

Before the world of computers, cataloging and retrieving photographic images was very labor intensive. You either had to wade through groups of images one at a time on a light box, or use the trusty slide projector. Then you had to utilize individual image data cards to index pertinent information about how the image was exposed, and where to look if you needed to locate it again.

Thankfully, computers have made life easier, for at least most of the time. We now have software thumbnail database programs that allow you to catalog and store enormous amounts of information about each of your images. Better yet, these databases are designed for both film and digital camera shooters. There are dozens of these programs that range from basic to extremely complex. A basic database program generally comes included with your digital camera. The very complex ones are usually stand-alone programs that allow you to do far more than just catalog images.

There are generally two basic methods of creating these digital photo albums. The first is what we call the "warm and fuzzy" approach and creates a database based on your favorite subject names. The second is the traditional method that uses a chronological sequence to save files. If you only have a small amount of images, then the first method works great, but if you are a prolific photographer, you should consider the second option.

A memory card reader provides a simple means of transferring digital images from camera to computer.

Step One: Convert Photographs into Digital Files

The first step is to convert your photographic images to digital files and transfer them into your computer system. Digital cameras are easy since they shoot and save in the digital format. All you have to do is transfer the images via a communications cable, or memory card reader. Scanning film images to convert them to digital takes longer, but once done, they have the same digital format as digital-camera images.

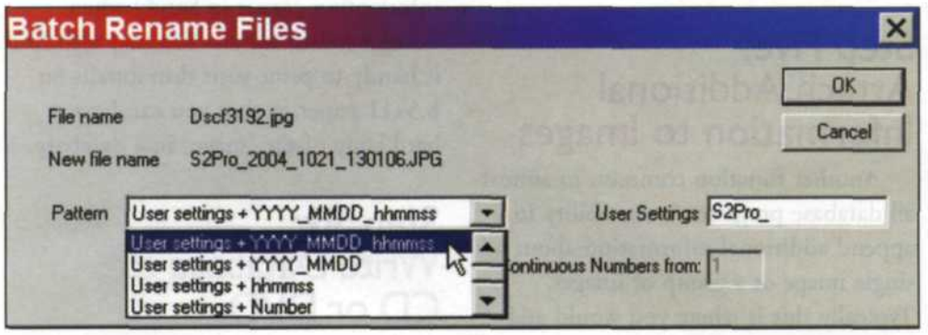
If you are on location with a digital camera, you can use temporary storage devices to write your digital files to a portable hard disk or CD

writer. Upon your return home, you can transfer them into your computer system so they can be added to your database.

A film scanner can quickly convert your slides and negatives into digital images.

Step Two: Rename Photos with Subject and Date

If you are scanning images to include in your photo database, you can give them file names that indicate the subject matter, camera, or film used. For example you can use: HotAirBallons0001.jpg, FujiVelvia100_001, or NikonF5_001. Digital cameras save files using a 3- or 4- letter prefix and a number sequence. These numbers have little value when searching for specific images, so almost all camera manufactures include a renaming function in the digital camera software. You should rename your files to include both a subject name and the date the image was shot, assuming the program will let you. For example: FujiS2pro_0411251356 or Flowers_0411251345. The numbers in the second half of the file name are automatically extracted and include the year, month, date, and exact time the image was taken. When you later do a search, you can search by either the time or date the image was taken or by the subject's name.



The batch renaming functions saves time by allowing you to rename a batch of images all at once.

Step Three: Create Tree of Directories and Sub-directories

One step that will help when you search for a file later is to sort your images into trees of directories and sub-directories. The more sub-directories you have, the easier it will be to find your images. If you are using a newer computer operating system, you probably have the ability to preview image thumbnails in the file manager. Once you see your images, it's easy to create new directories for different subjects and then move images around.

If you are using a chronological database system, you can sort the images by date, and then by subject within each date if you have the time. Most digital camera programs will save and rename files into chronological directories.

Step Four: Create a Thumbnail Database Album

Assuming that you have all your files converted to digital, and sorted into date and/or subject directories, you are now ready to create your

Sorting your images into trees and subdirectories will make it easier to find specific images later.

Getting Started

To get you started in your database search, here are some links to point you to other programs we have previously tested

Adobe Photoshop Album:
www.adobe.com

Ulead PhotoImpact Album:
www.ulead.com

Thumbs Plus:
www.cerious.com

ArcSoft PhotoBase:
www.arcsoft.com

Cumulus:
www.canto.com

ACDSee:
www.acdsee.com

Camedia Master:
www.olympus.com

Keywords	Fuji FX 700 Camera, Solomon Islands
Description	Taken from 2nd Deck at the back of the boat
Exposure time	1/58 sec
F stop	f/6.3
Exposure program	Aperture priority
ISO speed rating	400
Exif version	2.2
Date/time photo taken	6/3/2004 22:04:54 PM
Date/time digitized	6/3/2004 22:04:54 PM
Component configuration	Y Cb Cr
Image compression mode	2.0 bits per pixel
Shutter speed (APEX)	5.9
Aperture (APEX)	5.3
Brightness (APEX)	4.3
Exposure bias (APEX)	0.0
Max lens aperture (APEX)	3.0
Metering mode	Pattern
Light source	Afternoon Sun
Flash	Nobits per pixel
Lens focal length	7.7mm (eqv. ~43mm)

Most database programs allow you to append additional information to images, making for easier photo searches.

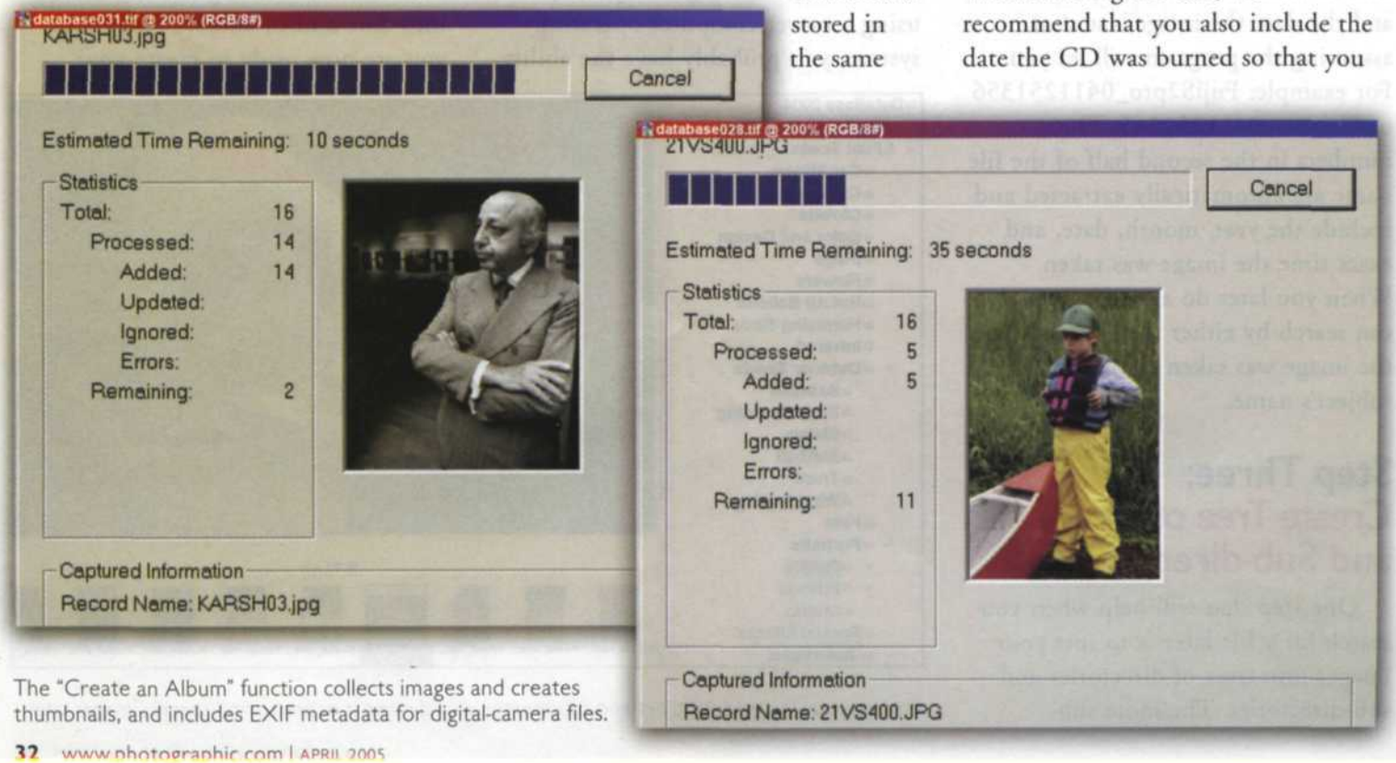
database. There are dozens of thumbnail database programs on the market, and most have similar functions. Using the "Create an Album" function, tell the program where your images are located and it will collect every image in that directory and create a thumbnail. If you are collecting digital camera files, the program will also collect all the EXIF metadata embedded in each file.

Step Five: Attach Additional Information to Images

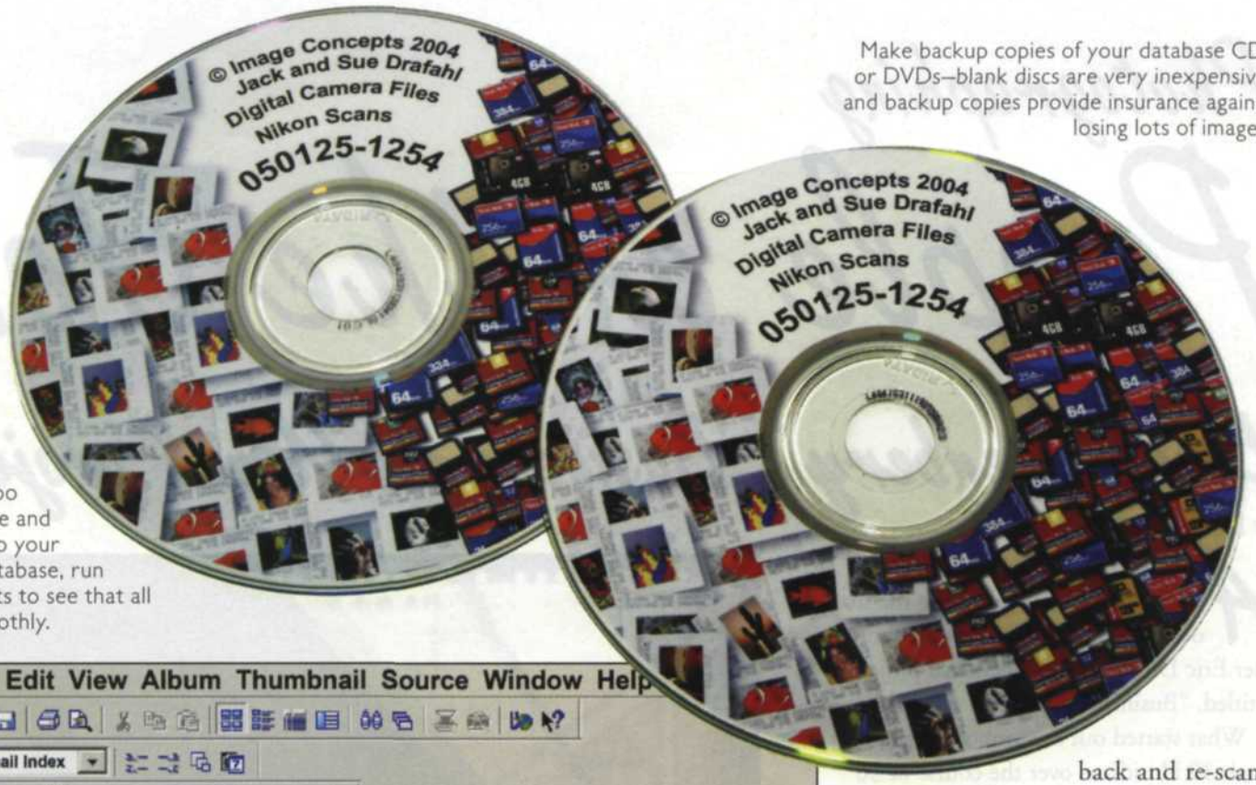
Another function common to almost all database programs is the ability to append additional information about a single image or a group of images. Typically this is where you would add information regarding location and lighting or anything that is not automatically recorded by the camera. This data is stored in the same place as the digital camera metadata and when you look at the EXIF metadata later, this new information will also be shown. This added information comes in handy when doing a photo search. You may also find it handy to print your thumbnails on 8.5x11 paper so that you can have a hard copy of the images in a database.

Step Six: Write Database to CD or DVD

If you are using the subject database system, you could write a related group of images to a CD. When labeling the CD, we recommend that you also include the date the CD was burned so that you



The "Create an Album" function collects images and creates thumbnails, and includes EXIF metadata for digital-camera files.



Make backup copies of your database CDs or DVDs—blank discs are very inexpensive, and backup copies provide insurance against losing lots of images.

Below: Before putting too much time and effort into your photo database, run some tests to see that all runs smoothly.

can easily convert to a chronological database in the future. The biggest drawback to a subject database is that you have to wait until you have enough images in a group before you write them to a final CD. When using a chronological database, you could write to CD as soon as you have enough images to fill one. Of the two database systems, classifying by subject takes longer to create, but is easier to find images later. A chronological database takes no time to create, but takes longer to locate images.

Step Seven: Duplicate Database

With the cost of CDs and DVDs at an all-time low, the additional expense of making a duplicate is well worth the cost and effort. With film, if you lost a slide or negative, your loss was generally only one image. If you lose a digital camera CD, you may lose hundreds of images with no hope of retrieving them. This theory also works for those burning CDs from slide and negative scans. It's true that you can go back and re-scan the images, but making a backup will save you a lot of time, energy and heartache.

Step Eight: Run Tests on Database

Before you put too much time and effort into your photo database, you should run some tests using your program. Make sure you are using the right file re-naming conventions, and that the program has no problem finding images with added information. Search by date, by subject, f-stop, shutter speed, and ISO speed to verify that you can search using the EXIF data stored in your digital camera files.

The Bottom Line

The effectiveness of your database will depend on how much time you invest in file re-naming and file sorting as you enter them into the database. Most database programs have more tools than you need, so learn which ones enable you to quickly access your files. Make sure that the database you decide to use does the job before you put too much time into it. If it doesn't, try a different one until you find one that matches your requirements. The database program we used to illustrate this article is called Ulead PhotoImpact 10. ■