

## Lynchburg Apple Core - Central Virginia Macintosh User's Group

**Thursday, January 15, 2004 - 7:00 PM - Room 4201, CVCC**  
Tom Johnson will discuss and demonstrate digital scanning and scanners

**PLEASE NOTE THESE SCHEDULE CHANGES:**

**Westminster-Canterbury - Tuesday, January 20, 2004 - 7:30 PM**  
**Amherst Public Library - Wednesday, January 21, 2004 - 7:30 PM**  
Internet and E-Mail Questions & Answers  
Report from Macworld San Francisco 2004

### **February's Meetings::**

**Westminster-Canterbury - Tuesday Feb. 17, 7:30 PM**  
**Amherst - Wednesday Feb. 18, 7:30 PM**  
Digital scanning and scanners  
**CVCC - Thursday Feb. 19, 7:00 PM**  
Creating Better Web Sites with Dreamweaver  
Report from MacWorld San Francisco 2004

And as always, bring your questions for Mac Help

# Apple Bytes

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## **Interested in a Scanner?**

*by Tom Johnson*

Many scanners are quite inexpensive now. They provide the capability of capturing images digitally from photos, slides, negatives, and graphic art. In addition, they can convert printed text (such as a page from a book or magazine) into editable text. This allows you to edit, cut, copy, and paste text as text, not as pictures or graphic images.

Take some time to check out ratings for different scanners you are considering. But don't be fooled into considering only the resolution rating given for a particular scanner. For instance, 4800 x 2400 dpi (dots per inch, or pixels per inch). The practical measure of a scanner is its ability to scan quickly, with both good resolution and color accuracy. This depends on the mechanics as well as its ability to track smoothly and accurately while it is scanning. If possible, scan something on the model you are interested in first. You will not need to scan a 4x6 photo at 2400 dpi. Not unless you want your image file to be 50 megabytes or more! A scan resolution of 300 dpi is more than adequate for most applications. However, if you scan something small, like a

slide, you should use a higher resolution, especially if you are cropping out a lot of the slide, that is, zooming in on a portion of the slide. Not all scanners are capable of scanning slides and negatives, which have to be backlighted to be scanned. You pay extra for this capability, so really consider how important this is to you.

When I wanted to give my sister a scanner for her birthday, I didn't really expect to find something good in the price range I wanted to pay. I wanted under \$50. Just exploring Circuit City's web site one day I searched for their scanners. Here was a Canon Lide flat bed USB scanner (USB 2.0) for \$49. I thought "they must be joking", looked at the specs. 600 dpi. Very thin and compact (will fit inside a book bag or a laptop case), no external power needed. Then I read the reviews. Out of over 50 reviewers, there was only one negative. This individual apparently did not read the setup directions and powered the scanner without unlocking the scan bed. The scanner tore itself apart. All of the other reviewers absolutely loved this scanner (not one neutral rating). They

thought this scanner was one of the best they'd ever seen. Some had access to very expensive scanners but used this one because it provided high quality scans. "It was so easy to use...", one reviewer said, "...my 4-year old is scanning with it." I bought it, mailed it to her, and the day she opened it she e-mailed me a photo taken

over 50 years ago of my brother and me. The quality was superb.

The scanner that will be demonstrated at the January CVCC meeting is a Firewire, flat bed scanner. If time permits, we may explore the Optical Character Recognition (OCR) capability that allows you to scan and convert printed text to editable text files.

### **Are You Prepared for the Next Crash?**

*by Tom Johnson*

To meet a hard drive crash, that is? Recently I lost the 2-year old 30 GB hard drive in my iBook. I spent several evenings working with Disk Warrior 3.0 and Apple's utilities trying to repair the hard drive, booting up with my external hard drive to delete files on the iBook's drive, getting conflicting reports from the diagnostic software. Finally I took the iBook to Sweet Briar College's Computer Services. They agreed that it looked like the hard drive might be faulty and took it in. They were right, their technician was able to reformat the drive around the bad sectors that occurred (losing everything that was on it).

I was somewhat lucky, I'd copied nearly everything to my 120 GB external Firewire drive recently (installed Jaguar on this drive so it is bootable too), so nearly all my files were intact. I ended up buying a new 60 GB drive for the iBook, no longer trusting the reformatted old drive for everyday use. SBC Computer Services installed the new drive and I kept the original drive as a backup.

The SBC repair technician reinstalled Jaguar 10.2.1. However, I had to go through updating Jaguar, and all the other software updates that have occurred over the last two years. Not to mention reinstalling all the software I bought for the laptop: Photoshop 6.0, Graphic Converter, my scanner, Roxio Toast, printer drivers, etc. This takes a lot of time.

Gordon told me about Carbon Copy Cloner, a shareware program that will clone one hard drive (or whatever you want on that drive) to another drive for backup. What is cloning? You cannot just copy your operating system and applications to back them up. They have a myriad of addresses and links that are established when you go through the installation process. These links are lost when you just copy those files somewhere else. The files are there but they won't work right. With Carbon Copy Cloner (CCC), an exact clone is created which can function just like the original.

I downloaded CCC, read the instructions, FAQ's, and other information. Then I cloned my now restored iBook drive onto my external

120 GB disk as a disk image. If I lose my current hard drive, I can open the disk image and clone my whole hard drive back onto the restored or replaced hard drive. It works great. Only works in OS-X.

Mike Bombich, the author of CCC, only asks that you send him a donation if you use the software. He asks for at least \$5. I sent him \$15, and think it would have been worth \$50 if I'd had it before my hard drive crashed. Any members of academia are strongly requested not to pay! Bombich wants CCC to be free to the education community.

What about my restored 30 GB hard drive? I bought an enclosure from Other World Computing (Macsales.com) for \$39. This enclosure turns the old laptop drive into an external, Firewire powered, 30 GB pocket drive. It came with a Firewire cable, zippered carrying pouch, and a power cord (required for some computers, but not Macs). Simple assembly (plug in the drive, screw it in place,

put the top case cover on, and screw it in place) and voila! My backup drive is now equal to a \$350 30 GB pocket drive. What did I do at once? Why I cloned my iBook hard drive into the pocket drive. I'm doubly backed up, on the external drive and the pocket drive.

When I get a DVD burner ("...soon Ira, v-e-r-y soon...") I plan to burn the disk image (after trimming the contents down to fit on the 4.5 GB DVD-R disk) onto a DVD-R for a really robust backup. Unfortunately, you can't clone directly to a DVD or CD with CCC. What you do is clone a disk image to a hard drive and then burn the disk image onto the DVD. To use it, you then mount the disk image from the DVD and clone it to the target hard drive.

CCC is a fairly small download, less than a megabyte. This is one program that is going to be on every hard drive I have and any of the backup DVD's I make in the future.

### **Mac OS X Class at CVCC February 20, 21, 27, 28**

The class will meet on Friday evening, Saturday morning and the following Friday evening and Saturday morning so as to minimize disruption of your normal schedules. It will cover both Mac OS X 10.2 "Jaguar" and Mac OS X 10.3 "Panther." You may take it again even if you've taken the OS X Class before. The cost is the normal 1 credit-hour charge for CVCC. And of course, Seniors get to audit the class for free. Sign up through the CVCC Admissions Office at 832-7633. Or call Gordon at 401-0163 for more information.

Tony Young and Gordon Mattox will miss January's meetings.  
They are attending Macworld Expo in San Francisco.