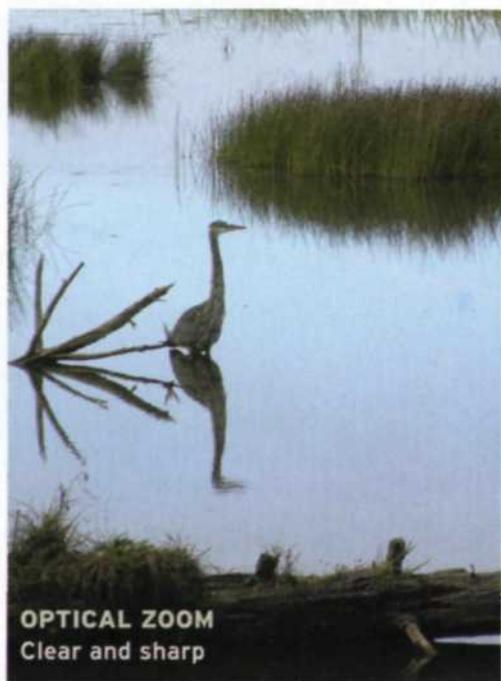


The Dark Side

Digital zoom versus optical zoom and recovery from media failure

BY JACK & SUE DRAFAHL



When you take your digital camera underwater, many of its new technologies make underwater photography easier and more rewarding. You'll notice that we said many ... not all.

When digital cameras first came out, one way for manufacturers to compete with each other was to extend the range of the camera zoom with a feature called digital zoom. This only served to confuse consumers when they had to understand and choose between digital and optical zoom.

The concept of digital zoom does not compare with optical zoom in capturing quality images. It does nothing more than enlarge the image off the CCD sensor. The result is a smaller file and an enlarged image, but the quality is considerably less than optical zoom. There are even some cameras that rescale the cropped image to match the original file size. Although the resulting file is better, it still can't

compete with optical.

For maximum quality, cropping an image should be done in your photo-editing program, not in the camera. When you work with your images in your editing program, you have more control and versatility, and a higher-quality end product.

If you are shopping for a new digital camera, make sure that the zoom rating of the camera is optical and not digital.

The good news is that the default for digital zoom in most digital point-and-shoot cameras is OFF. Be sure to leave it that way. By remembering to utilize the optical zoom option on your digital camera, you will be able to obtain the higher quality images that you desire.

ERASED OR LOST IMAGES

Another part of the dark side is the loss of digital images on memory cards due to card

malfunction or human error. It is rare to see memory cards fail, but we have seen a few. Almost all the card failures we have seen occur when you run the battery power down to a point where the camera shuts off while saving a file to the memory card. If you see the battery power indicating that it is low, quickly stop shooting images. Otherwise, you risk losing images being transferred to the memory card.

The bulk of the memory card image losses are due to accidental deletion or reformatting before the images are transferred to a more permanent storage device. So, is there any hope for these lost and erased images?

Not to worry. Yes, there are special software programs designed especially for recovering images from digital media. These programs read the files you have deleted from your memory card and transfer them to a designated hard disk.

Even if you have reformatted the memory card, don't despair. Your reformatted card still contains all the pertinent image data until you start writing new images.

We tested the PHOTORECOVERY program from LC Technology International Inc. (www.lc-tech.com) on a couple of reformatted cards and found images we had taken almost a year ago.

Here are a few more programs to help in your image recovery: ImageRecall 2 — www.flashfixers.com; Photo Rescue — www.datarescue.com/photorescue, and Digital Picture Recovery — www.winutils.net.

Join Jack & Sue in the field. They have several digital dive adventures planned for 2004. April 3-10 and 10-17 aboard the *Nai'a* in Fiji; May 1-8 at *Captain Don's* in Bonaire; and the digital duo will team up with Cathy Church for a digital week in Cayman July 10-18. For more information, go to www.jackandsuedrafaahl.com.

Winning Essence

The Sea & Sea "Essence of the Sea" photo contest wrapped up on Nov. 15 and the judges agreed: Christopher Menjou of Torrance, California, took first place with his surreal "Rays of Rays" photo shot off Catalina Island. Second place went to Anthony Grote of Grand Cayman for his shot of the famous site Stingray City. Two honorable mentions were also awarded, to Paul Osmond of Weston, Florida, and Andy Lerner of Santa Monica, California, who captured winning shots of a garibaldi and a Hawaiian toby, respectively. The talented winners received gift certificates from Sea & Sea ranging from \$100 to \$1,000. To see the winning shots, go to www.sportdiver.com/photocontest.

Canon Rebel Goes Digital for Under a Grand!

The most exciting digital news is the announcement of a digital SLR under \$1,000! Canon took the marketplace by storm when it introduced the EOS Digital Rebel, a 6.3-megapixel SLR. Underwater housing manufacturers scrambled to design housings to accommodate this affordable autofocus SLR newcomer. Ikelite, Aquatica, Jonah and UK-Germany have housings ready, or almost ready, and other manufacturers are not far behind.

► Effective pixels: Approx. 6.3 megapixels. ► Approximately 2.5 frames per second. ► 1/4,000 second to 30 seconds plus bulb ► 1.6x indicated focal length compared to 35 mm format. ► 12 shooting modes. ► Only weighs 19.7 ounces. ► Accepts Type I and II compact flash card. ► Canon EF, including EF-S lenses. — J&S