

# IMAGES

Making Your **STILL, VIDEO** and **DIGITAL** Underwater Images Better



## TIPS & TRICKS

# Making the Switch

*Are you ready for print film? Concentrate on composition, not exposure*

BY JACK AND SUE DRAFAHL

Are there any open-minded film shooters out there? If so, we would like to take a moment to let you in on a secret that might just make your underwater images zing.

Most beginning underwater photographers will tell you that they were encouraged by their instructors and photo manuals to use color slide film. It seems that print films were considered "amateur films." Well, we are here to set the story straight. As film reviewers for

*Petersen's Photographic* magazine for almost 30 years, we have put many films through their paces. We found that most of the research and development by film manufacturers has been in the color negative area. So about 16 years ago, we decided to make a cold-turkey switch from color slides to color negatives for all our underwater images. The only time we made the switch back was when we had a slide film to test.

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With slide film, exposure is critical and not often easy to determine. Exposures must be within plus or minus one stop in order to be correct. You often need to bracket your exposure to guarantee good results, so this lessens the quantity of images that you can shoot during a dive and takes up valuable down time on dives.

Color negative (print) film, on the other hand, can capture images with exposures from plus four to minus three stops. You can capture a wide range of images and there is no need to bracket your exposures. This allows you to concentrate on composing your images rather than worrying about exposure.

If your goal is prints for scrapbooks or to decorate your home, then color negatives are the perfect choice. In addition, you can always have slides made from your color negatives if you need them for a slide show.

Times have changed too with the advent of computers and film scanners. You can now scan color negatives and bring them into your computer for color correction and image enhancement. There is even software now that can reduce the more dominant grain structure found in color negative film.

The only way you are going to know that color negative films have moved up a notch from their "amateur" standing is to give them a try. Keep an open mind and maybe you'll be surprised.

*Send your questions about film and digital photography or image editing to us at [digitalduo@jackandsuedrafahl.com](mailto:digitalduo@jackandsuedrafahl.com) and we will try to answer them directly or in an upcoming column.*

*For further information on our photo trips and new books, take a look at our Web site at [www.jackandsuedrafahl.com](http://www.jackandsuedrafahl.com).*

VIDEO

## Hi-Def for Real People

BY CLAY WISEMAN

If ever an oxymoron existed, the phrase "consumer-priced high-definition camcorder" would be a big one. For years I have dreamed of shooting in high definition, the format that fills a movie theater, broadcasts beautifully and splashes over a 50-inch home flat screen with the highest-resolution wide-screen true-to-life image ever seen in video. So impressive is this format that George Lucas is using it to create the modern *Star Wars* prequels.

Up to now, high definition has been a professional medium, with a camera costing a minimum of \$60,000. But last summer, JVC introduced the GR-HD1, an inconceivable break in tradition: This small camera is a single CCD high-definition camcorder available for around \$3,500. With Gates Underwater Systems already geared up to produce a housing deliverable by December 2003, it seems that my dream and that of many underwater videographers will soon come true.

This month on [www.sportdiver.com/video](http://www.sportdiver.com/video) I will "deliver the goods" on the revolutionary new JVC GR-HD1 camcorder and the new Gates housing. Check out the results in high-definition wide-screen format.

## Digital Point-and-Shoot Advantages

- » Instant results
- » Correct your mistakes immediately.
- » Compact
- » No film to process
- » You can take more than 36 images per dive.
- » Storage media reusable.
- » Cameras have close-up capability.
- » Excellent image quality
- » Affordable
- » Accessory lenses expand creativity.
- » You can review your images on a TV.

Ready for a digital point-and-shoot camera? Check out the following easy-to-use options: The Olympus Stylus 300, a 3.2 megapixel all-weather camera for use with the PT-016 housing ([www.olympusamerica.com](http://www.olympusamerica.com)). The Sea & Sea Aquapix (see review at right), a 3.1 megapixel amphibious camera ([www.sportdiver.com/ebrochure/seaandsea](http://www.sportdiver.com/ebrochure/seaandsea)). The SeaLife DC310 (see review at right), a 3.3 megapixel underwater camera ([www.sportdiver.com/ebrochure/sealife](http://www.sportdiver.com/ebrochure/sealife)).

## WHAT'S NEW?

### SeaLife DC310

Here's what I usually do when I return from a trip: I get my film developed and then end up throwing half the shots away because they didn't turn out. And while no camera can take a photo for you, a digital point-and-shoot will at least give you instant feedback and allow you to take another whack if, like me, you need another whack.

The new SeaLife DC310 3.3 megapixel point-and-shoot underwater digital camera has a one-button "instant delete" function to help ensure that after the dive, you'll only have the keepers and look real impressive in front of the other shutterbugs on the boat. But instant delete isn't the only feature on this handy little camera. It has land and sea modes, and an external flash mode for low-light situations.

Features include: 3.3 mp CCD sensor; 8 mb on-board memory; SD card compatible; 1.6 inch LCD color monitor; 2X digital zoom; movie JPEG capable; and quick-review function. There are optional lenses for wide-angle and macro, and the system has been depth-rated to 200 feet. Other features include image-viewing software, USB cable for downloading photos, video cable and care kit.

Don't be overwhelmed by the list of specs – this DC310 has the one-touch simplicity that makes taking underwater photographs a delight.

Suggested retail for the DC310: \$549.95. For a more complete setup, the Proset system contains the DC310, external flash, 3X close-up lens and a soft carrying case: \$769.95. For more information, visit [www.sportdiver.com/ebrochure/sealife](http://www.sportdiver.com/ebrochure/sealife). – Ty Sawyer



### First Amphibious Digital Camera

We knew it was just a matter of time before someone did it, but the question was who would be first? This time Sea & Sea crossed the line first with its premiere of an all-amphibious digital camera.

The AquaPix DX3100 is a 3.1 megapixel camera that contains 16 MB of onboard memory, but you can add more memory by using SmartMedia cards. With an automatic shutter speed range of 1/40 to 1/1000 of a second, the DX3100 automatically adjusts to all photo situations. There's no more wondering if you got the shot, because photographers can preview the image right away on the 1.6-inch preview screen on the back of the unit.

The DX3100 features a built-in strobe and light diffuser that works in tandem with the auto-programmed white balance to adjust exposures based on a diver's depth.

The AquaPix can also use Sea & Sea's most popular strobes, the YS25 Auto, YS90DX and YS90 Auto, to provide even more lighting control.

The AquaPix camera features an attractive lightweight cover that's gray with yellow accents. It has a built-in color filter, a close-up lens and a self-timer. The macro lens allows photographers to capture images as close as 10 cm, or at a normal focusing distance of 30 cm. This new model also

accommodates the 20 mm wide-angle lens, which allows divers to change lenses underwater during a dive, a feature that most underwater cameras definitely don't have. Its flexibility, adaptability and user-friendly price of just \$619 should make this camera a winner for both divers and aquatic enthusiasts. As soon as we have had a chance to take the AquaPix for a dip, we will provide a more in-depth report. Until then, you can find more information on the AquaPix camera and other fine products at [www.sportdiver.com/ebrochure/seaandsea](http://www.sportdiver.com/ebrochure/seaandsea).



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