

GOING DEEP

A Terrestrial Photographer Finally Gets His Feet Wet

By Jim Cornfield

I started to toy with underwater photography about a year ago, launching a personal aquatic odyssey that began with an 8-megapixel point-and-shoot and has me, most recently, photographing 15-foot great white sharks in the wild with a pro-DSLR. Like other commercial photographers lured by their seaborne muse, I was sure in the beginning that, having spent 30-plus years at my profession, I pretty much had command of the necessary fundamentals. Saturated with all that enticing undersea imagery in *National Geographic*, *Sport Diver* and dozens of adventure chronicles on the Discovery Channel, this specialty, however exotic the locations, looked to me like mostly a matter of doing what I already do, just doing it a lot wetter. Funny how wrong you can be.

A Craft You Learn From the Ground Down

Budd Riker is a seasoned underwater photo instructor. He's the rock-solid, unflappable guy you want around during an emergency. He doesn't anger easily. So, how come, as he and I bob to the surface in the warm Caribbean waters of the Cayman Islands, Budd is patently miffed at me? Miffed, as in, "What the hell are you doing?!"

What I'm doing is, after three days of underwater photography instruction under Budd's tutelage, briefly reverting to my reptilian brain and violating the cardinal rule of the diver-cum-shooter: Be a diver first, then be a photographer. In other words, don't compromise your safety (or anyone else's, human or otherwise) just to get a shot.

Close-up of a friendly Caribbean angelfish made with the Olympus Stylus Tough-6020 camera and underwater housing. Angelfish can be attracted under water by the opening and closing of a Velcro fastener.

deep thinker

Most of the world's best underwater photo educators are great photographers in their own right. Here are three fine examples:



Cathy Church: A 2008 inductee into the Scuba Diving Hall of Fame, Church is internationally renowned as an underwater photographer and the author of five books on photo technique. Still in demand as a commercial and

fine art shooter, she devotes much of her time to underwater photo instruction at her Cathy Church Underwater Photo Centre & Gallery in the Sunset House Dive Resort, Grand Cayman Island (www.cathychurch.com).



Budd Riker: A versatile adventure photographer and journalist, Budd Riker added underwater shooting to his skills in 1978 and never looked back. As International Director of e-Business for PADI, Riker combined his virtuoso photo-

graphic talents with the skills of a truly gifted teacher. The "Follow Your Camera" blog on his Web site is a must-see for every diving photographer (www.buddriker.com).



Cesar Rodas: A multi-faceted native Honduran, Rodas operates the Photo Center at the popular Anthony's Key Resort, an elegant full-service diving lodge and a prestigious dolphin research facility.

Cesar's stunning underwater photographs appear on posters and magazines and online throughout the Caribbean.

I'd like to blame the whole thing on *Opistognathus aurifrons*, a yellow jawfish, maybe three inches long, halfway burrowed in the sand 30 feet beneath us as Budd and I wrap up our dive. I have plenty of air remaining for a safe ascent, when I suddenly spot one of these tiny creatures peeking out below me and, on impulse, I bubble back down to the bottom. With my camera set to macro mode, I hover above a pencil-sized hole in the ocean floor, waiting for a maddeningly bashful little fish to reappear for his close-up. He never shows, and, in the process of waiting him out, I nearly suck my scuba tank airless.

The rule at most safety-conscious diving resorts is to exit the water at the end of every dive with around 500 p.s.i. of air still showing on your pressure gauge. (A standard pre-dive air fill is about 3000 p.s.i.) Through pure carelessness, fixated on the jawfish, I ignore my dial as it edges down into the danger zone. By the time my head breaks the surface, I'm practically breathing aluminum. What's worse, I've ascended the last 15 feet way too fast, another idiotic breach of safety. Fortunately, Riker's celebrated cool prevails, and we write the incident off to what I realize has urban legend status among the wetsuit set: It's far easier to turn a good scuba diver into a competent underwater photographer than it is to teach underwater photography to a know-it-all, experienced topside shooter.

By way of punishment for this fit of hubris, my photo privileges are put on hold for the entire next day. I'm to spend the time reviewing safe diving skills—first the most fundamental dictum, "Breathe and repeat as necessary," then on to the basics of adhering to a dive profile, a sort of underwater flight plan—and the essential techniques of buoyancy control, the *sine qua non* of scuba diving proficiency. All of this in service of that mantra, "Be a diver first," which naturally prompts the question, "Why go to all the bother?" In my case, the answer's simple: water, water, everywhere.

Our Soggy Blue Home

In 1990, when the Voyager 1 spacecraft turned its camera around for one last backward glance at our solar system, Earth stood out among its planetary neighbors as a pale blue dot. The blue, of course, is water—139,507,734 square miles of it, over 70 percent of our planet's surface. That's



how we look from outer space: an orbiting wet spot. And that's not Windex, remember; it's water. Things live in it, about 250,000 species by the current census, and scientists estimate that another 1.75 million species are as yet undiscovered. Many of these creatures have descended like a string of clones, nearly unchanged from their prehistoric antecedents. This is the true forest primeval, a vast, diverse biosphere, scintillating with life, from fan corals and sperm whales to blennies, hatchetfish, sharks and siphonophores—in short, an almost limitless array of dazzling photo ops.

For me, having spent 35 years shooting portraits and scenics and tabletops—the usual gamut—over five continents in both hemispheres, it made sense to finally take

a camera down into this immense blue wilderness that constitutes most of what we call home.

Total Submersion

My enabler in this effort is the Professional Association of Diving Instructors (www.padi.com/scuba). In the rarefied world of scuba, PADI is the wizard behind the curtain, setting the bar for safety and responsible instruction at 6000 international dive centers and resorts, from Palau to Pennsylvania. Beyond the basic Open Water Diver certification course that all PADI affiliates offer are a score of advanced specialty training programs for scubanauts at every level of expertise. Included in these is a comprehensive photography curriculum, available at PADI



Opposite: Dramatic abstract designs are often tucked away in extreme close-ups of the coral reef. This is the distinctive configuration of aptly named "Brain coral."

Above: A large male Great White shark shot from the safety of an aluminum cage near Guadalupe Island, Mexico. Hi-res cameras are best suited for this type of photography, this one an Olympus E-620 with polycarbonate housing. Cage diving at white shark habitats requires the help of very skilled operators, such as California-based Shark Diver (www.sharkdiver.com).

Left: The author setting up a shot of tube sponges off Grand Cayman Island. Camera is an Olympus E-620 DSLR in a PT-EO6 Housing (www.olympusamerica.com). Strobes and camera are mounted on pan and articulated arms by Ultra-light Control systems (www.ulcs.com).

dive centers and online as well. My first exposure to this program was an outing with a gifted shooter and PADI-trained instructor, Cesar Rodas. Along with his teaching, Rodas runs the photo shop at lavish Anthony's Key Resort on Roatán, the centerpiece of Honduras' gemlike Bay Islands (www.anthonyskey.com/en). After a morning dive at Anthony's to view the nearshore submerged wreckage of a C-47 aircraft, Cesar guided me along a reef wall to the lair of a marvelous barracuda so tame you could actually stroke its back as it hovered over the coral. When he handed me a little point-and-shoot SeaLife ReefMaster to photograph some friendly dolphins, one of them, a young male the locals call "Ricky," promptly tried to take the camera from my hands. Cesar got a picture of that moment, and from then on I was hooked on the idea of shooting under water.

Shuttle forward a few months to an annual event on the west end of Grand Cayman Island. It's called "Total Submersion," a PADI-sponsored convocation of divers, around 80 in all, who've gathered at Sunset House Dive Resort (www.sunsethouse.com). During a weeklong gala alternating diving with some exuberant revelry, a steady stream of scubaphiles splash all day long into the sparkling waters off the resort's broad stone landing. Others board a small armada of motor launches bound offshore for supervised dives at popular venues with names like Trinity Caves, Eagle Ray Rock, Armchair Reef and Slaughterhouse Wall.

To accommodate the general photo mania among this crowd, PADI's made available a stash of Olympus Tough 6000s with underwater housings to anyone who wants to try this rugged, cutting-edge line of cameras. There are workshops and presentations by world-class shooters like *Sport Diver* magazine editorial director Ty Sawyer. Cathy Church's Underwater Photo Centre & Gallery, a Cayman landmark and part of the Sunset House complex, offers supplies, equipment and technical support. And, of course, there's Budd Riker. Between his entertaining seminars and bouts of giving hands-on photo tips to eager amateur shooters, the tireless Riker has taken me on as a *cause célèbre*, shattering a lot of my preconceptions and re-prioritizing my approach to photography.

Say It Again: Be a Diver First

Photographic principles like the inverse-square law and the rule of thirds quickly take a backseat to esoterica like Boyle's law and Surface Interval Time and other indispensable minutiae that have to be mastered before I can even hope to handle underwater photo situations. On my first offshore outing with Riker, our boat swings around its mooring above a reef called Lone Star, and the dive master announces, "Pool's open!" to our group of divers. Budd and I don our gear and descend together, 50 feet to the bottom. For the next 40 minutes, I'll barely get a shot off, as Riker puts me through the paces of neutralizing my buoyancy with breath control and bleed air from my scuba tank. He carefully demonstrates how to line up shots without laying a finger on Lone Star's fragile soft corals.

suggests a simple protocol: "SEA—shoot, examine, adjust."

Shot control, just as in a topside situation, combines functions like format selection (RAW is preferable, but not always practical), image resolution and white balance settings, plus strobe to enhance color and contrast at depth. The other SEA rules are manageable with even the most modest digital camera and after-capture software. Most later model LCD's provide a reasonably accurate rendition of your exposures to examine, while you're under water. But Riker cautions against the disreputable habit of "chimping," stopping between shots to dote on your last image while you breathe away your precious air supply. As for image adjustment, there's a lot of power in those Photoshop sliders. Sharpening,

above a reef or school of angelfish help provide a sense of scale and usually suggest a little story line. As we wind down over lunch, Riker reminds me that divers are not native wildlife, and it's important to respect the creatures that are. "Try to belong there," he cautions, "be calm around these animals. They're acutely aware of you, and sense when you're excited or acting in a predatory manner." He especially discourages chasing photographic quarry, not only because it alarms the animal, but also because it never results in a decent shot. "The backside of a fish or turtle swimming away from you is useless," he says. "It just demonstrates that humans are slower in the water than the native inhabitants. This is their world," Riker stresses. "Respect the privilege you have to be a visitor."



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Next day, the same boat bounces through wind chop to our first dive of the morning near Eagle Ray Rock. Over thrumming engine noise, Budd manages a mini-lecture on the effects of water density on picture quality, light loss being the most obvious, along with flattened contrast and the familiar blue monochrome that's a perennial nuisance to every underwater photographer. Riker agrees with me that a lot of these issues have been significantly softened by the advent of digital imaging

PADI's digital photographer's manual

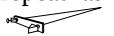
brightness/contrast, selective color and color saturation functions rescue more underwater images than many photographers care to admit.

Try to Belong There

High on the list of diving safety canons is the written-in-stone rule to never scuba dive alone. All reputable dive operations prohibit this dangerous practice, and, with everyone diving alongside a "buddy," underwater shots frequently include at least one other diver. Human figures bubbling

Dropping in on the Great Whites

Three months after my Total Submersion experience, I pay a visit to an underwater habitat where the locals have no doubts that it's "their world." Scuba skills are not an issue in the Great White Shark cage-diving experience off the coast of Mexico's Isla Guadalupe. These formidable creatures can be seen and photographed at close range from the safety of an aluminum enclosure suspended just below the surface. (See *Rangefinder*, Nov. 2009.) Unlimited air is supplied from topside tanks, via hookah-style hoses. I descend the shark-cage ladder with a hi-res Olympus E-620 DSLR cocooned into a polycarbonate PT-EO6 underwater housing. Riker's "first be a diver" mantra is not particularly relevant right now. I'm standing, wetsuited, on the cage's wire floor, clutching my camera rig and peering into the blue-black depths for the appearance of the day's first great white. As a lightning fast, 15-foot male abruptly lurches into view, not 10 feet in front of me, its pectoral fins pointed downward in the posture of aggression, and its black eyes sizing up the occupants of our cage, I force myself to remember that other scuba diver's fundamental: "Breathe... and repeat as necessary."



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