

Introduction

I ran face-to-face into an 8-foot alligator. Most likely he sank down trying to escape our bubbles. Dropping down, he headed straight down on top of me. The light must have confused him as well. At first I thought it was a log, but then I realized it was a big, fat, black gator. Both of us freaked! I swung my arm and he did a 180 and bolted. . . . We returned into the siphon to map the passage. I flinched at several gator-ghosts along the way. Great dive.

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WHEN WES SKILES DIED on July 21, 2010, in a diving accident, news traveled fast among those of us who work to protect and document Florida's remarkable springs—one of the largest stores of fresh water on the planet.

In the days afterward, people e-mailed around a story from the *Washington Post*, the one with the headline that none of us could wrap our heads around yet: “Wes Skiles, Photographer Who Captured Vivid Worlds Underwater, Dies at 52.”

The *Post* story described how the striking underwater photographs and films Wes did for PBS, IMAX, and the Discovery Channel revealed “a dark,

alien world,” how Wes had once escaped after being buried alive in an Australian cave, how he was the first to set foot on the largest iceberg in Antarctica, and how he used his bulky camera in South Africa to fight off a great white shark that barreled right through his (supposedly) protective metal cage and ended up with “close-up photos of the great white’s jagged teeth as a token of his survival.”

The *Post* reported that Wes’s pictures of stalactite-filled underwater Bahama caves called blue holes were, coincidentally, the cover story of that month’s *National Geographic*. It went on to say:

Such adventures were the reason Mr. Skiles became a photographer. In an online profile, he quoted an ad from Sir Ernest Shackleton, who was seeking men for his Antarctic expedition: “Men wanted for hazardous journey. Low wages, bitter cold, long hours of complete darkness. Safe return doubtful. Honour and recognition in event of success.”

Under it, Mr. Skiles wrote, “pretty much reflects my life.”

With his *National Geographic* cover story, which had a much-coveted but infrequently published pull-out photo section, Wes had reached the top spot of adventure journalism. Remarkably, he had become one of the best photographers in the world by practicing his art in places with no light. He started making pictures before digital cameras were invented, using film and flashbulbs, and rigging up homemade equipment to survive the dangerous, deep places that most people wouldn’t ever think of going. We were all rooting for him. Now, dammit, he was gone.

When I drove back to Tallahassee after Wes’s funeral in tiny High Springs, Florida, I grieved for his family—his wife of twenty-nine years and his two teenaged children. I was still contacting environmental colleagues to try to make sense of it. To those who knew him, and even those who just knew of him, it was not really surprising that Wes would meet his end while diving. But dying during a routine open-water dive in 75 feet of water, not back in some unexplored underwater cave miles below the Earth’s surface? Nobody expected that.

The coroner listed the cause of death as drowning. That didn’t explain much. Wes had just spent two weeks on a shoot for television’s premier science program, *NOVA*, filming for a segment called *Speed Kills*, which fea-

tured footage of high-speed predators. This one focused on the ocean. Wes was hired to film schools of a large, ugly fish called the goliath grouper.

He wasn't happy with the footage he'd shot. But *NOVA* was moving on. So ten days after leaving the *NOVA* shoot, Wes went back for another dive with scientists studying the fish, on his own time and on his own dime, to try to get better footage off Boynton Beach, near Palm Beach.

He was using borrowed diving equipment, a computerized rig called a rebreather. The device allows divers to recycle their own breaths by scrubbing out the carbon dioxide. It also produces no bubbles, which is chiefly why Wes was using it. Bubbles tended to scare off fish. No bubbles meant better footage.

They'd gone to a reef about a mile out, and were shooting, when Wes signaled to them that he was going up to the surface because his digital tape needed replacing. Not long afterward, the scientists swam by and found him on the ocean floor, his breathing regulator out of his mouth.

"There was nothing to indicate natural causes or outside forces," the medical examiner's chief investigator told the *Palm Beach Post*.

Some of Wes's closest friends thought they knew what might have happened: the rebreather had malfunctioned somehow, and Wes passed out and drowned. At least, they thought, he never knew what hit him. At least he didn't die back in some cave, lost or trapped, waiting for his air to run out. Like so many others they had known.

"You lose a good friend, and especially doing what we loved to do, we always have to take a step back and say, you know, why am I doing this again?" Wes's Bahamas dive buddy Brian Kakuk told me. "And then it always comes back, every time—some of us *have to* keep doing it. It's in our blood. We can't stop it."

History is full of explorers, and this is the story of one, a homegrown Florida boy who saw a watery cave in the palm-filled forest and knew right then that he had to go inside.

WHEN YOU START TALKING about cave diving to people who aren't cave divers, you get interrupted right away.

"No way!" they say, shaking their heads. "Those people are crazy. I would *never* do that! *Never!*"

You don't hear people saying that when you talk about other explor-

ers of extreme environments, like astronauts, because most people can't imagine themselves on the Moon. But many people have swum and snorkeled over underwater caves. They've looked down into those depths, and it stirs something uncomfortable in their bellies.

Face it: there is just a visceral difference between those of us who would swim down into a stony hole in the bottom of a dark river and those of us who would not. If we topsiders are claustrophobics, maybe the best way to describe these extreme cave divers is to use a word a friend of mine made up: claustrophiliacs.

Cave divers will tell you that they actually like it down there. They like how the Earth cocoons them in inky darkness and perfect silence. They especially enjoy the feeling that, like astronauts, they are the first ever to see a place that was once unreachable to humans—virgin territory known among hard-core underwater explorers like Wes as “cave booty.”

Neuroscientists who study extreme risk say that for some people, the thirst for adventure may be biological, determined by levels of the pleasure chemical, dopamine.

“Dopamine helps elicit a sense of satisfaction when we accomplish tasks: the riskier the task, the larger the hit of dopamine,” writes Peter Gwin in a 2013 *National Geographic* article. “Part of the reason we don't all climb mountains or run for office is that we don't all have the same amount of dopamine. Molecules on the surface of nerve cells called autoreceptors control how much dopamine we make and use, essentially controlling our appetite for risk.”

One Vanderbilt University study found that people who had fewer autoreceptors in the part of the brain that is linked to reward, addiction, and movement were more prone to novelty-seeking behavior like exploration.

“Think of dopamine like gasoline. You combine that with a brain equipped with a lesser ability to put on the brakes than normal, and you get people who push limits,” neuropsychologist David Zald said.

I always assumed that cave divers had to wrestle down their fear before going inside the underwater tunnels—because that's what I would certainly have to do if I were to take up the sport. But the cave divers I interviewed say they never had fear; they were drawn inside at first sight. They describe being in the underwater caves as “church,” “the womb,” and “Mother Earth”—a pure place where they experience unrivaled peace and a singular focus.

“Generally, if you had some nervousness about a particular dive,” one cave diver told me, “the minute you get in the water and take off down that dive, it all goes away. Just goes away. You swim in, the water’s crystal clear and it’s pretty. It doesn’t feel dangerous.”

It’s a state Hungarian psychology professor Mihaly Csikszentmihaly calls “flow,” which he describes as “being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one, like playing jazz. Your whole being is involved, and you’re using your skills to the utmost.”

The only time fear enters the picture, the cave divers I’ve interviewed say, is when things go awry underground. A heavy boulder falls and blocks an entrance. Fins stir up silt into a whiteout. Something malfunctions with their equipment. When that happens, they have to resist giving in to emotion.

“The alligator brain takes over, and the back of your head starts getting hot,” one diver says. “I mean honest to God, literally, it’s warming up. Hair is standing up on the back of your neck. You just cannot stop being productive. You have got to do the right thing. And you absolutely are sitting on top of emotions that will kill you if you let them go. So you conquer your fear.”

When asked why he was drawn to cave diving, Wes put it this way:

Cave diving is really a dangerous sport in a way. In other ways it’s benign; it’s easy if you have the right training and equipment. There’s no reason for cave diving to be dangerous. I ride a dual sport motorcycle on mountain dirt roads and on clay in rain and lightning storms. I look at going on a cave dive and some of the things I do on a motorcycle, and I go, “Whoa, motorcycle riding at the level I do it is much, much more dangerous.” The problem with cave diving is it’s totally unforgiving.

When something happens, it tends to create this cascade, this series of events, and if you manage them perfectly you stay alive. If you fail to have total focus on solving the problem, you often die. The challenge of cave diving is task loading, that you have to follow these very strict rules and preserve them all the time, stay one hundred percent in the moment. You’ve got to be *there*. You can’t

drift off and think about the relationship with the girlfriend or the boss, or the stress of a new scenario. When you're down there, the physical danger, the reality is that if something goes wrong, you can count how long you have from that moment to hopefully getting to the surface in breaths.

There are not a whole lot of sports like that. There are a lot of sudden-death sports. Climbing a mountain, free climbing—slip, you're dead. Cave diving deaths are much more hideous.

When things go wrong, you realize it, and you have thirty, forty minutes, an hour, hour and a half—yet you're not going to survive. In that respect it's really agonizing that you're trapped, you're lost, you can't see to find your way out. You run out of air and die a very agonizing, ugly death.

Really, what it's all about is comprehending that we have sometimes hundreds and hundreds of feet of rock above us and hundreds and hundreds of feet of rock below us. We're diving in this very narrow void inside the spaces of the rock. You don't want to think about it a lot when you're down in the caves, because when you *do* think about it, you can feel the weight of the Earth pressing down upon you.

You can only get to the level of photography that I do by having the sport be second nature. That, everything you do within it, you're comfortable thinking ahead and planning and knowing what you're going to do and how you're going to approach it and contingency plans for survival. Only when you can do that can you pick up a camera and take a picture. . . . You have to put together a phenomenal number of things as far as light and coordination and direction and depth and action to create these images. While you're doing that, you also have to be reminding yourself that you're cave diving and doing one of the most dangerous things on Earth.

The truth is, we are all better off because Wes had that biologically innate drive to explore, and because he also wanted to communicate what he saw. Some of the wonders that he and other cave divers discovered could be documented only by going down there into the deep black unknown. No GPS or x-ray machine or penetrating radar would do the job. The words “environmental hero” get tossed around too much, but Wes

was one. Despite a tight-lipped, clannish culture of secrecy among his peers, despite people calling him crazy and warning him not to go further toward danger, Wes became one of the rare cave divers who climbed out of the depths to tell us where our water comes from, where it's going, and what we need to do to keep it clean.