



## DANGERLAB!

# Underground Emergency

IN ONE OF THE WORLD'S BIGGEST  
CAVES, A SCIENTIST GETS IN OVER  
HER HEAD.

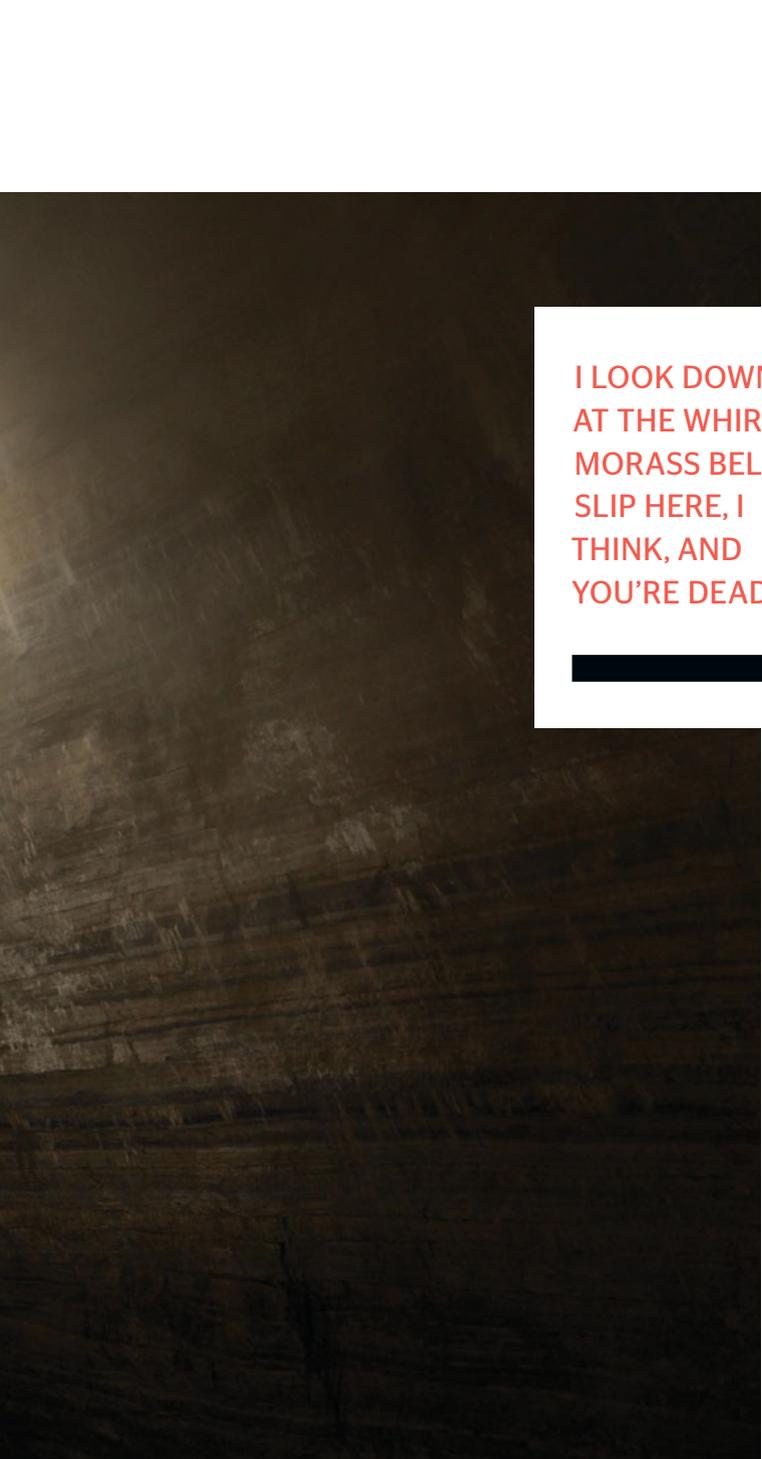
BY HAZEL BARTON AS TOLD TO JED LIPINSKI

**T**ONGZI, CHINA, 2011—Deep inside the mountain, we hear the sound of a river. The four of us—all researchers who study caves—are exploring Quankou Dong, or Big Spring Cave, in a remote, mountainous part of China, just south of Chengdu.

The “big spring” is a river that runs through a passageway from one end of the enormous cave to the other. Along the way, it churns into class 4 rapids. Hours earlier, we’d entered through a dry passage. Now, it’s full of water, rising fast.

The cave’s entrance is stunning: 100 feet wide, 300 feet high. Once inside, you pass through Cloud Ladder Hall, a 16-acre room so high it has its own weather system. One of the largest cave chambers in the world, it rises more than 1,200 feet, though its roof is typically hidden by clouds.

We first went inside Quankou Dong in 2008, after it’d been discovered the year before, and we had been back several times.



I LOOK DOWN  
AT THE WHIRLING  
MORASS BELOW.  
SLIP HERE, I  
THINK, AND  
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On one occasion, I slipped on a rock, fell in, and got tossed around in the rapids! It wasn't funny at the time—class 4 rapids are very difficult to maneuver and can be incredibly dangerous—but my colleagues and I laugh about it now.

This year, we're undertaking an epic 24-hour exploration. Since you can't rent a car in Tongzi, we pay a driver 300 yuan to drop us off and then pick us up the following day. We're wearing kneepads, wind-resistant PVC suits, and helmets equipped with powerful caving lights. Our packs are full of climbing equipment. Around 2 p.m., we arrive at the mouth of the cave.

A few hours in, the passage bifurcates into wet and dry passages. We take the dry one. Unlike with most geographical features, there's no way to identify caves or where they lead without physically entering them and exploring. This passage is about 10 times the size of a train tunnel, and as we climb and rappel into the heart of the mountain, we measure distance and inclination

and map coordinates. We sketch images of the cave in between. It's big. In places, it feels as if we're standing outside on a starless night.

We work for 20 hours, branching off into narrower passages and other rooms, before deciding to return. That's when we hear the river. After a few hundred feet, we find ourselves staring up at a 30-foot waterfall. A *brand-new river* is surging through the dry passage. It has the force of an open hydrant.

I look at my teammate Duncan. He's the toughest guy I've ever known. He says, "Uh-oh."

My mouth goes dry. I think, "We are in so much trouble."

It takes us a minute to comprehend. We've been underground so long that we didn't realize it had started to rain. The rain, we assume, has caused one of the wet passages along the way to block up like a clogged sink, sending water rushing into the dry one.

Obviously, we can't just walk up what is now a violent class 5 rapid. It occurs to me that we may have to reverse course and climb onto a ledge until the flood subsides. But how long would that be? Twelve hours? Seventy-two? We have only a few PowerBars left, and we're already wiped from the daylong climb.

As I'm brooding, Duncan springs into action. The right and left sides of the waterfall are relatively dry. We watch as he free-climbs the right, leaps over the fiercer rapids at the top of the falls, and disappears.

Ten minutes pass. I start thinking terrible thoughts. Then, suddenly, a rope comes down. Another teammate, Mike, grabs hold and ascends the 30-foot face. I go next. Halfway up, I look down into the whirling morass below. Slip here, I think, and you're dead meat.

I make it over the ledge. There, I find Mike lying on top of Duncan. They're both wedged inside an alcove, serving as a human anchor for the rope. I throw myself on top of them and stay there until our last teammate, Tommy, makes it safely to the top.

And yet the waterfall isn't our biggest concern. On the way in, the passage had been nearly sealed off by a massive boulder. We'd barely managed to squeeze around the edges. If the water has risen above it, we'll be trapped.

After a three-hour trek, we reach the boulder. The river is rushing around only one side of it. The water is freezing and neck-deep, but we bypass the rock easily. Another three hours later, we finally emerge from the cave into the pouring rain, shivering and soaked. We find the van idling on the side of the road. Our driver takes one look at us and smiles.

We know we'll return to Quankou Dong. We've left behind stainless-steel climbing bolts in the rock. A year later, we do return. But when we go to clip in, we discover that the bolts have been sheared off the rock by the force of the floodwater. All evidence that we were here before has already been washed away. ☹