

Some comment on Meduza 2015 caving photography

Caves have always engaged people's imagination. Early on in childhood we hear stories about the treasures which they hide, we learn about spectacular dripstone formations that took tens of thousands of years to grow, and now and then we stumble upon images of great abysses carved by water. Caves are among the mysterious places which inspire and intrigue.

But the reality of cave exploration is often far from what people might expect. There are good reasons why quality photographs and videos of caves are few and far between. Caves are not only beautiful and mysterious. They also can be challenging to walk through, let alone to photograph. The challenges include difficult and dangerous terrain, ubiquitous water, mud, dust, and sand, as well as unpleasant temperatures and the obvious lack of natural light. Some caves are so vast that underground camps need to be set up. That requires providing the explorers with food, fuel, and shelter from cold and humidity. Of course these are not the only things that have to be carried underground. Some paths in caves need to be rigged with ropes to ensure safety. Falling rocks of all sizes are an additional concern.



*This relatively small step required rope access to ensure safety.
Photo: Michał Kamiński*



*Maintaining gear is a challenge.
Photo: Paweł Ruda*

The Caves are dangerous and unpleasant not only to people, but also to the photo gear. Dust in all gradations gets under every moving part: the tripod heads, sliders, camera buttons, and even the zoom lenses. Nothing is safe. During our expedition we found it impossible to both work efficiently and maintain our gear clean. In such difficult conditions, it is best to minimize opening the camera's slots. That's where our Kingston 128 GB cards came in very handy.

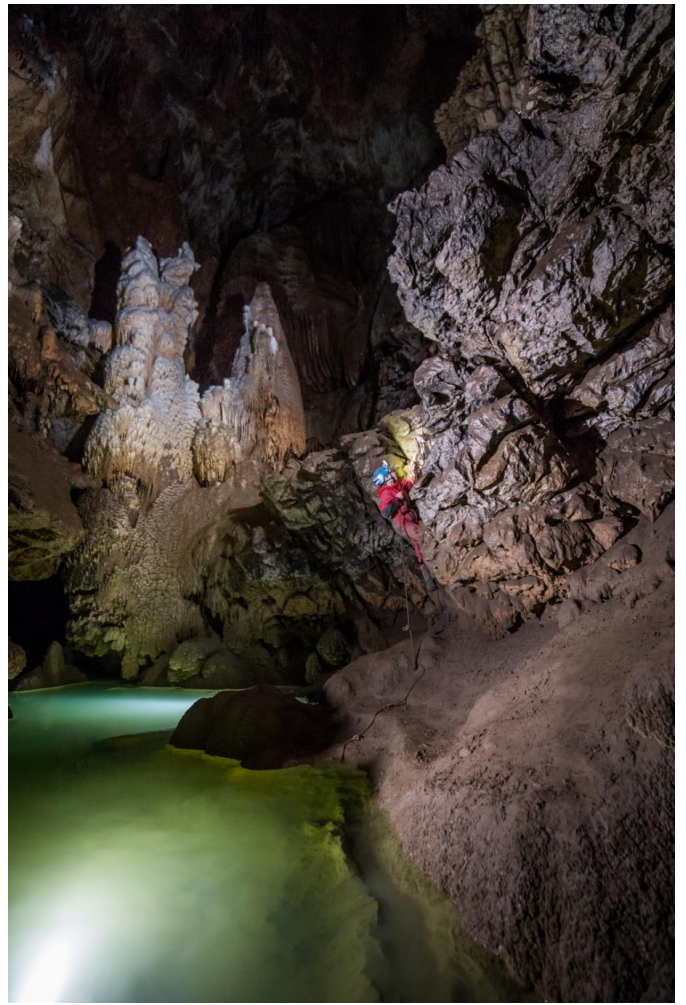
We worked with Canon 6D, with the 20 MPx sensor. Shooting in the RAW+ JPEG mode, you get about 25MB per picture. This means that you can save about 5000 images on a single card without having to open the card slot and risk contaminating it. Even though filming fills up cards faster, we had enough space to shoot freely most of the time and we were able to change cards only after getting out to the surface. Speed was not a problem. There was simply no possibility we could have encountered any lag with the 45 or 80 MB/s write cards. They are faster than the 6D writing capability.



The process of taking a picture begins with choosing an interesting spot. This was no problem in Đalovića where we found something worth the effort every 20 meters. After choosing a particular frame, the lightening needs to be set up. Using the camera flash is not an option. If the light source is near the lens, the image looks flat and uninteresting. For best results, it's a good idea to use 2 or 3 external flashes located in different spots of the frame. This results in pictures of nice depth, reflecting the three-dimensional nature of the underground corridors. Having someone in the frame makes it easier to estimate the scale of the photographed features. After figuring out the right location for the lights, the power of each light source needs to be set. This will depend on their distance to the camera and on the space they have to illuminate. It usually took us three to four test exposures to achieve satisfactory results. If the only light source being used is the flash, low ISO settings and shutter speed are usually kept. This makes it possible to get sharp images without the need for a tripod. Illuminating cave lakes is a little trickier. Lights used for that are a lot dimmer than flashes. The easiest way to deal with this is simply to decrease the powers of the flashes. However, this requires upping the ISO, which in turn degrades image quality. Of course there are ways to overcome this problem, but this is something we will do on our next expedition. The Kingston cards worked very well throughout.



*Good example of a two-light configuration.
Photo : Michał Kamiński*



Handheld shot with high ISO. Two diving lights submerged in the lake. One flash for the first plan, one for the background. Photo :Pawel Ruda



*We recommend these little plastic cases for your cards.
Really cheap, but good protection.
Photo: Pawel Ruda*