

By Michel Roggo

FAR AWAY, SO CLOSE

Revealing close-ups of brown bears and alligators – remote control underwater photography lets you see things that many divers can only dream of...



1. Red, or sockeye, salmon in the Adams River, British Columbia, Canada
Settings: f/8, 1/20s, ISO 200



④ **I started doing** remote control underwater photography because I wanted to photograph salmon in Alaska while travelling alone for weeks out in the bush on a canoe. You simply can't do that easily with diving equipment. So I started very simply: sitting on the shore, just holding a Nikonos V in the water. But of course, it didn't really work.

The next year I returned with a camera in an underwater housing, put this on the riverbed, rigged up a cable to release the shutter, and waited for fish to swim by. Some shots were quite good, but this didn't really work either.

I was using slide film, with no autofocus. I had to focus on a certain point, and then wait for a fish to swim into the composition, past the right spot and at just the right distance. Sometimes I waited for days: one image, a wonderful composition of green algae towers with two carp swimming past, took me three days to capture.

The next year I returned with the same system, but this time with a small, built-in video camera that allowed me to see what was happening in front of the lens, and it worked very well.

This might not sound very original, but this was 30 years ago, and I was certainly one of the first (if not the first) to be photographing this way underwater. I have now been shooting regularly in freshwater for about

25 years, travelling all around the world. And I'm still always looking for new and interesting scenes with the most dramatic light – a marsh pond, under the ice in a mountain stream, among algae, incredibly beautiful habitats that are hardly ever seen.

REMOTE ADVANTAGES

First comes the image, and then the technique. I don't make these images because I have a special remote controlled system: I have the remote controlled systems because I had the ideas for the images.

There are many advantages to working like this, especially in rivers. You can wait for hours on the shore for the right shot – something you can't do freediving or on scuba. You can work in dangerous locations, or with dangerous animals. And animals get used to the housing, so they behave more or less normally.

My set-up now consists of a camera in a housing with a small video camera at the viewfinder. It's best to use one of those tiny lipstick video cameras.

Occasionally I use the underwater housing as a pole cam, but most often I leave it on the riverbed, either fixed on a metal frame with weights, sometimes secured with a ground spike. It depends on how strong the current is. I always shoot in ambient light – I haven't used flash for over 10 years now.



A cable sends the video signal to the shore, and I can sit on the shore, smoke a cigar and watch TV, the “freshwater network”! When a fish swims into the composition, I release the shutter with the cable. It sounds very easy – but often it doesn’t work.

FRESH CHALLENGES

All too often, something goes wrong. Air bubbles on the dome glass, murky water, shutter speed too slow, the camera focusing on the tail instead of the eye. With this technique good images need lots of time and persistence. For my pictures of Atlantic salmon, for example, I made perhaps 20 trips to different salmon rivers across the globe, before finally getting the perfect conditions: crystal clear water, hundreds of salmon, and bright sunlight for one week. But this was after 20 years of unsuccessful attempts!

Today it’s much easier than it used to be. Now, I can make thousands of images without taking the housing out of the water, autofocus works quite well, and you can push the ISO without too much noise.

But the main challenge is that I have developed this system myself. So I make all the cables, connectors and adapt the housing to my needs. And I use it out in the bush, sometimes under really rough conditions. There are always problems with bad electrical contacts and short

circuits, and so on. But, as I’ve built it myself, I can usually fix it again, one way or another. So I never go out in the bush without my Swiss army knife. But these are just the technical challenges.

Working a lot in rivers, sometimes in strong current, I often risk losing my equipment, or scratching or even destroying the dome. And then there are the animals. One day a pikeperch attacked and totally destroyed a brand new dome. But that’s not even the worst of it: I’ve had my underwater housing attacked by crocodiles and brown bears, and sometimes completely wrecked. They are just so powerful, but you’re normally simply happy that you yourself are still in one piece after an experience like that...

WANT TO CONTROL IT REMOTELY?

If you want to try remote control underwater photography yourself, you will probably have to start by building your own set-up and transforming an existing housing. This is the main hurdle.

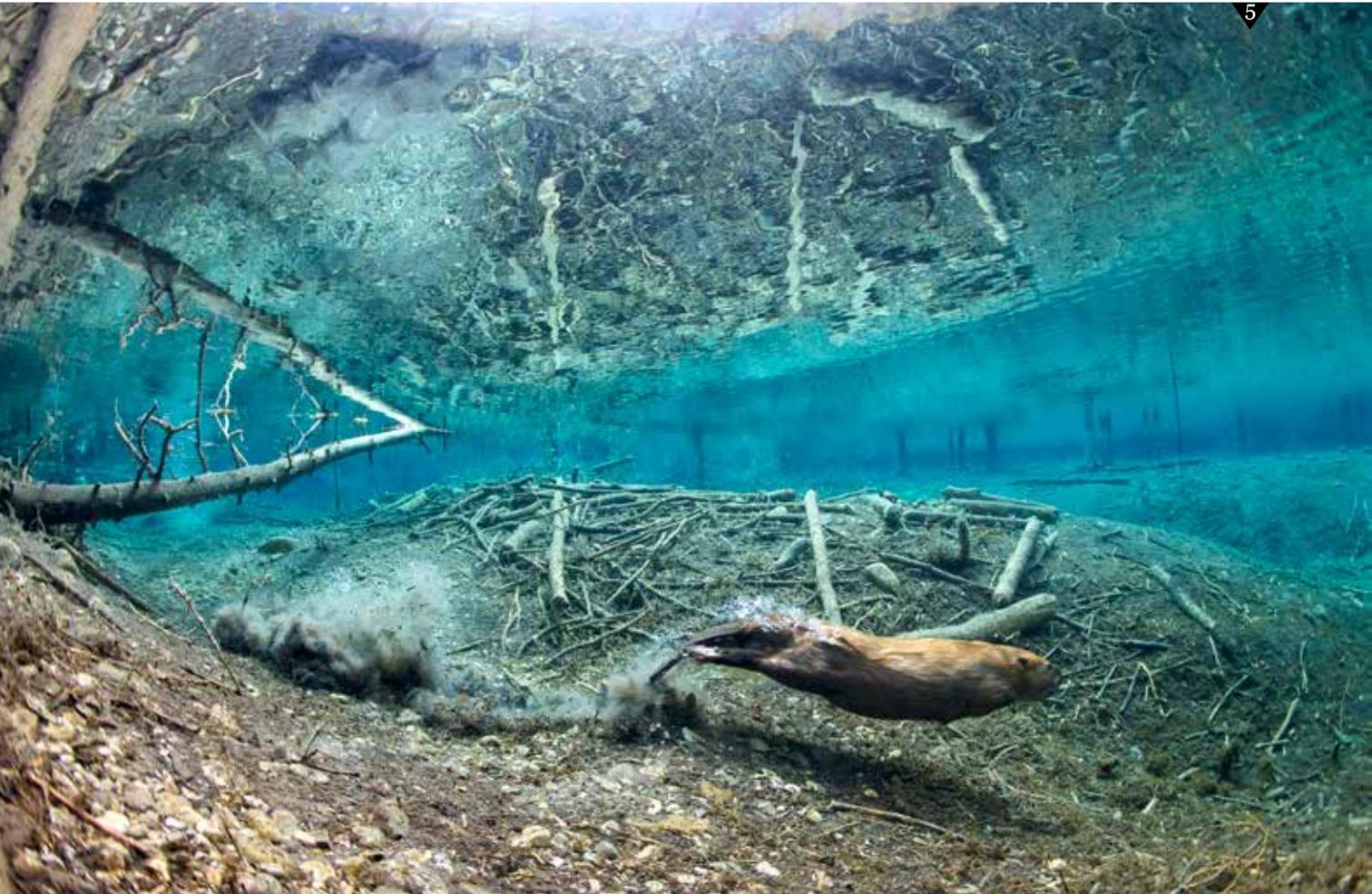
Then, you should start with something you know very well, something in your backyard – a small creek, your garden pond. Just hold the camera under the surface,

2. A brown bear, *Ursus arctos*, in the South Kamchatka Sanctuary, Russia
Settings: f/8, 1/80s, ISO 400

3. Pink river dolphin, *Inia geoffrensis*, in the Rio Negra, Amazon, Brazil
Settings: f/5.6, 1/500s, ISO 800



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explore a small part of the water. I still do this sometimes, walking in a shallow river, holding the camera by hand, without seeing what's in the frame.

Try everything, long exposures in low light, for example. I sometimes do long exposures in rivers with the camera on a tripod. Go into the middle of an outcrop of plants. Play like a little child. Just go out and do it. But don't expect it to be easy. I started a few years ago diving and snorkelling for underwater photography, to explore new fields. I have to say that it really is the easier way. To have really good results with a remote controlled system, you have to work very, very hard. But it's fun!

With photography, essentially you need technique and creativity. And you can only learn one of these. You have to work on your sensitivity to beauty. For me it is much more important to go to museums and galleries (and not only for exhibitions of photography) than to read all the technical stuff.

For me it is even extremely important to listen to good, mostly classical, music. While I was working with the Kamchatka brown bears, at night I was listening to Tchaikovsky, very loudly, and all the images of these powerful animals were going off like volcanoes in my head. That was really Russia at its best. I couldn't wait to get out early the next day to make all the images I had seen in my mind. **SDOP**

4. A chalk stream, part of the River Itchen in Hampshire, England
Settings: f/8, 1/80s, ISO 400

5. An American beaver, *Castor canadensis*, displays its aquatic grace in the Northern Rockies, British Columbia
Settings: f/5.6, 1/400s, ISO 400

6. A black caiman, *Melanosuchus niger*, rests on the bottom of the Rio Negro in Brazil
Settings: f/8, 1/100s, ISO 200



Michel Roggo in the field. Image © Alex Buschor

Michel Roggo, from Fribourg, Switzerland, is a professional photographer and member of the International League of Conservation Photographers. iLCP. Michel has had more than 30 exhibitions of his work, won numerous prizes in competitions, including Wildlife Photographer of the Year and European Wildlife Photographer of the Year, and his work has been published by a large number of major international publications. www.roggo.ch



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