

The rough side of commercial underwater photography!

By Paul Kay

In the UK we currently have some of the most draconian legislation covering diving for profit. The emphasis on safety has taken many twists and turns and has resulted in a myriad of strange, sometimes contradictory, difficult to implement and often worrying rules. Indeed there are many who believe that the regulations now governing commercial diving simply work on the premise that divers are safest not going in the water!

A typical example of the 'overkill' required under the current legislation is shown by an assignment that I recently undertook. This was to provide publicity photographs for Exploris, an aquarium and seal sanctuary run by County Down Council in Northern Ireland. Apart from anything else, this was an interesting job because the vast majority of photographs were taken using the Nikon D1x camera which produced images of appropriate quality, and which could easily be utilised by the staff who needed the pictures for a variety of differing purposes.

One part of the assignment called for underwater photography to be undertaken within the largest display tank in the aquarium - some 3m deep and something around 10m x 10m in area. This obviously entailed the use of scuba gear, and so an appropriate dive team was put together using the local commercial diving firm. This is



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the firm which also supplies divers to clean the insides of the large transparent acrylic or perspex sheets through which the public view the creatures inside.

These divers are more used to operating in atrocious visibility in the local dockyards, harbours and other similarly miserable places, so diving in an aquarium is a somewhat different and, one would think, more pleasant experience for them. I too felt that this would be rather different from my normal diving, but I was in for a few surprises.

I had assumed that, being indoors, the water in the tank would be warm, so I didn't bother putting gloves on. Wrong! Had I realised that the water was put through chillers before it entered the tank then I would probably have acted differently.

It was freezing and I would not have liked to have been in anything other than my drysuit with its many layers of undersuit and thermals!

I had also thought that it would be easy enough to get close to the often very large fish (cod, bass, mullet, hake - some up to 1m long) in the relatively confined space. But no, although not panicked, the free-swimming fish simply avoided me, leisurely moving off whenever approached, and preferred to move into the darker corners out of my way. I did manage some decent pictures but far fewer than I would have liked.

Not having a housed digital camera meant that this part of the assignment had to be shot on film, and to do so I used a Nikon F100 in Subal housing with the



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superb 17~35 AFS Nikkor (with +4 dioptre close-up lens fitted) behind Subal's largest (fisheye) dome mounted on a 33mm extender tube (as per Subal's recommendation).

For additional illumination I used two Nikon SB105 strobes fitted with diffusers with the second, or slave unit, operating through an Inon ttl sensor fitted into the flash lead socket. This is a very effective system whether using ttl or not and reduces the need for a second lead (or socket on my other housings). Strobe arms were a mixture of Ultralight and TLC parts which are highly interchangeable and were fitted in a 4" 8" 8" 4" configuration to both strobes.

The complete housing, dome and twin flash units is a bit of a beast (I usually add a Kowalski on top as a spotting light too!), and is very cumbersome above water. Below the surface it remains slightly negatively buoyant but is very easy to operate.

The light levels in this tank were deceptive. From the outside viewing areas the tank, which is lit from above, appears to be very bright and well illuminated. But this is to eyes that have accustomed themselves to the lowish light levels in the preceding parts of the aquarium. In fact the





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meter readings showed exposures of around 1/2s at f/11~16 using Fuji Provia III at its normal ISO 100 rating. Some use of available light was essential in order to convey the scale of the tank, so I simply resigned myself to operating at such settings and adding flash.

From all the photographs taken in the tank there was one notable and very much appreciated (by the client) success - a shot of a very large conger. This (not far off 2m long) animal was absolutely fascinated by its own reflection in the big dome port. It slowly came out from its hole from under the carefully constructed small wooden wreck, until it bumped its snout on the glass. Not just once but many times. Best of all, from my point of view at least, was that having started to do this it then the emboldened conger also started to peer closely at my 'buddy'!

Having photographed congers many times, I am convinced that they are much maligned creatures and are generally somewhat timid but curious. I have very rarely heard

of anyone being bitten and when I have, it is usually as a result of feeding the animal or inadvertently putting a hand in its crevice. Fortunately, nobody seemed to have said this to my 'in-water standby', commercial diving friend!

I am still unsure whether his face with popping eyes was simply good acting for the camera, or perhaps sheer terror. No, I am sure that having worked in harbours in appalling visibility, he must have been surrounded by many congers this size in the past. But of course he may not have realised it in the murk!

The rays and flatfish in the tank proved to be very accommodating, and basically ignored our presence completely. Other free-swimming fish were awkward to photograph and often remained just out of range. Interestingly the 'rock' surfaces within the tank are slowly being colonised with even anemones starting to appear, presumably out of the plankton.

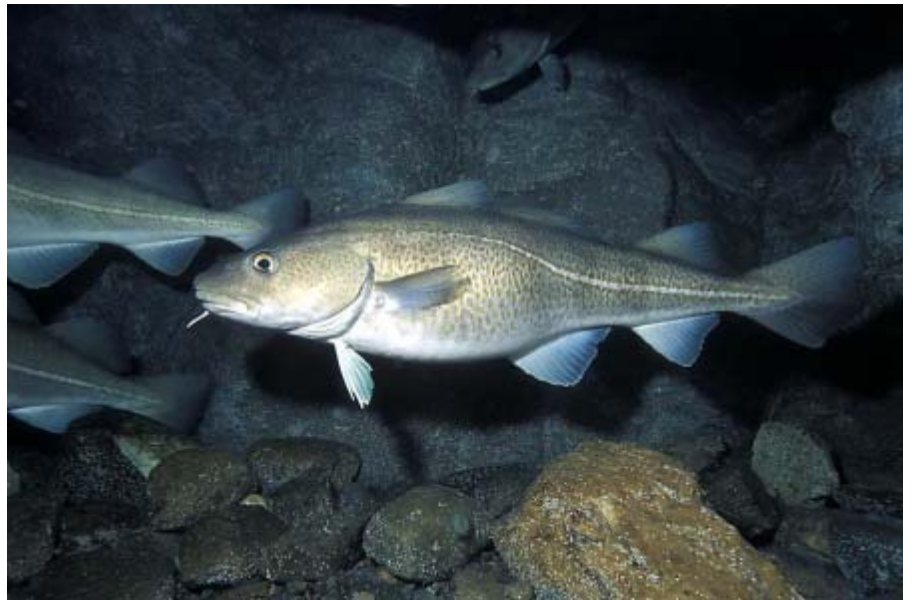
After about an hour it was time to leave - as the fish are confined it is necessary not to

cause any overdue stress. The trickiest part of the dive was inevitably getting out up a ladder lowered into the tank, as it involved handing up a heavy camera housing which is far too easy to grab by the numerous arms, and which could so easily have swung into the concrete 'rock'.

Having clambered up the ladder, it quickly became apparent that visitors had been both intrigued and entertained by the newest exhibits in the aquarium - two divers clowning around with a camera and friendly conger.

Photographically, the results were intriguing. I scanned them to the same size as the tiff files produced by the D1x and supplied them in identical fashion to a satisfied client. It would of course be good to be able to shoot such material direct on digital, but although there are a few high-end cameras now being housed, there are still many hurdles to be overcome before these become a real viability for underwater use. The current Nikon digital SLRs don't support multi flash in ttl mode

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and so would have to be used with manual flash control. Not a drastic problem, but then the small lcd 'reviewfinders' can only give an approximation of the final image, and so aren't a terrible efficient way of reviewing the quality of images shot on the camera. No doubt both these aspects of digital cameras will change though.

The assignment did prove interesting in some aspects of digital photography though. One of the most effective images was of a young rescued seal pup. Taken from above it showed another creature totally fascinated by the camera,

looking straight up into the lens.

The pup was very dark in colour and was paddling about in a few inches of water over a glossy white surface. This is a very difficult high contrast scene to photograph, not in terms of exposure (it needed compensation of +1 stop dialled in) but because the contrast when shot with flash is so high. I doubt whether film could have coped as well as digital capture did.

The image is tonally superb and would probably have been far too contrasty to have been captured on transparency or even negative films. This in itself is food for thought and a reminder

that digital has possibilities which may expand photography beyond the boundaries dictated by today's conventional materials.

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