

ROYAL PHOTOGRAPHIC SOCIETY



IN THE BLINK
OF AN EYE

RPS NATURE GROUP E-NEWS

In The Blink of An Eye

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Introduction

Since the digital revolution, photography has been in a constant state of flux. The sophistication of camera technology and the advances in software development make it possible to capture images that would have been difficult to achieve with film in the past. Is it a good thing? In many ways, yes, but the continual pushing of the boundaries means as photographers we need to frequently revise our style and approach. Exploring other ways in which we can express ourselves through our imagery can often mean looking at familiar subjects differently.

I was commissioned some time ago to shoot a series of behavioural images of frogs for a publication. At that time I was also drafting the chapter in my current macro photography book on flash and was looking for subjects other than insects. The commissioning client also wanted, if possible, to show the subject diving into the water and the posture it adopted when doing so.

Frogs spend most of their time close to a pond, or stream. When danger threatens, they quickly head for the relative safety of water, using their large and powerful hind legs to propel themselves off the ground and into the murky depths beyond the reach of potential predators. I was keen on this occasion, to show the subject's posture and behaviour adopted under the water rather than breaking the surface as most high-speed images often show.

I have always had an interest in high-speed flash, and worked on Barn Owls and several other species using film and medium format during the 1990's. At that time, Stephen Dalton was the pioneer of high-speed flash photography and had a world-renowned reputation in this field. As a young enthusiastic nature photographer, I was delighted when I was invited to join Stephen's Natural History Photographic Agency (NHPA) as it was then over twenty-five years ago. I got to know Stephen and he was kind enough to write the foreword for one of my early photography books. He had, himself, worked on frogs for some of his earlier publications and I greatly admired his images of them and the many other subjects that graced his viewfinder. His images were inspirational then, and still are today even twenty-five years on.

One of the qualities that separates an inspirational photographer from the average is not technical competency (although important), but innovation, a creative mind and the ability and determination to carry it through. The camera is not the first, but the last link in the chain; its function is merely to capture the vision. Planning and preparation are the key factors to creating successful images in my experience.

Planning

Spring is an ideal time to work with these fascinating creatures: activity among individuals is high and specimens are much easier to find. I am one of those people who likes to plan everything out on paper in advance. The construction of a suitable tank was the first of the tasks. I thought a glass unit of around 50cm would be adequate for the type of shot I had in mind. It also needed to be large enough to accommodate a frog at full stretch jumping into the water, but at the same time not too big otherwise the subjects would have too much of an area to choose from. The tank was constructed using quarter-inch glass, but I used a thinner sheet on the front section to improve the clarity. The tank was placed on polystyrene to even out any possible stresses in the base when filled with water.

Setting up the Tank

When selecting and arranging collected material from a pond, it's easy to overcomplicate the set. You should have some idea in your mind as to how you want to arrange the aquatic material in advance. One thing to be aware of is, the more elaborate your set is, the more problems it's likely to cause you. Keep things simple, that way you will have fewer problems when it comes to the microparticles and broken fragments of aquatic vegetation that appear in the water, which although natural, can be a source of annoyance and a distraction when illuminated with flash.

It's a good idea to leave the water standing for a day to allow the tiny air bubbles, which congregate on the surface of the glass and the algal bloom to settle and clarity to return to the water. To keep the temperature cool, I place ice cubes into the water before I begin to shoot since the temperature of the water is naturally higher than it would be outside. Getting any creature in water to behave naturally is all about trying to emulate its natural conditions as close as possible.

The Shoot

Once I was happy with the set arrangement, I used a pair of LED lights mounted on goosenecks, which made it easier to adjust the position of the lighting and gauge the overall effect when replaced with the flash units. An old toy duck of my daughter's was the prop, which I suspended on a wire in the tank; this allowed me to work out the ideal lighting position and assess the overall ambience of the setup.

The next step in the process was to provide a prop for the frogs to jump from. When everything else was in place, I positioned the infrared beam close to the surface of the water as a starting point, although this would need some fine-tuning once I got started. I also knew from previous

experience with other subjects that there would be issues to solve, especially getting it to perform within a restricted area. Also, establishing the ideal focusing spot so that most of the images would be reasonably sharp since the subject was likely to interrupt the beam in a different place each time. Travel distance from interrupting the beam is another issue that requires a little fine-tuning. I did some test shots to refine the exposure but accepted that the lighting would also vary slightly with each shot depending on where the beam was interrupted.

I was fortunate that I had a ready source of frogs just a couple of hundred yards from my home and collected several so I could swap between sessions. I was careful not to overdo it with a single specimen. Short sessions work best; subjects become easily stressed and will lose the incentive to jump. One frog barely jumped at all, when it finally did it was a bit of a clumsy affair. However, I found that one particular frog was a lot more responsive and amenable than the others and despite overshooting the tank on numerous occasions; it did not dampen its enthusiasm for jumping. Patience is the key but be prepared for a high failure rate. The speed at which they enter the water is fast and despite trying to reduce their options, you cannot be sure where they will interrupt the beam! Legs are often partially out of the frame while other shots despite having an ideal posture can be slightly out of focus. Each time they jump the speed at which they enter the water varies as does the position of the legs. Persistence does pay off and after a couple of days and approximately 200 photos later I had managed to get some which I was happy with.

One of the advantages of digital capture is the fact that you have instant access to the image and can tweak the setup when necessary, which I had to do on some occasions during the sessions. From the beginning of the project, I had an image in my mind of what I wanted to achieve and by the end of the two-day session I got what I wanted!



Image information

The three example images show how different the postures are when they enter the water at high-speed. You can clearly see the protective membrane that covers the eyes when entering the water. The final image (left) is the posture that I had in my mind when I started the project. You can also see the trapped air bubbles surrounding the head.

All images photographed at ISO 200 using a Nikon D810 and 105mm micro Nikkor lens.