

Paul Witney, BGS Photographer... by Catherine Pennington

Paul Witney at the coast in Holderness helping to develop a new method of 3D photogrammetry

After several years teaching photography, Paul joined BGS in 2005 and is responsible for photography and video in Southern Britain. He is called upon to photograph every aspect of BGS work from the

core store to fieldwork, from microscopic fossils to aerial photography.

Whilst on fieldwork, scientists are not always able to record good images of the work they are doing as they are often busy with the science itself. The time constraints imposed by a rising tide, for example, means care and consideration for photography are easily missed. Paul is on hand to do this job. This frees up the scientists from having to think about photos and videos, but also means that the very best images are captured with the expertise and equipment only a professional photographer has. It also provides the opportunity for Paul to record BGS staff doing their jobs.



Paul is not fishing here, he is taking photographs down a sinkhole in Kent!

Paul has worked on a huge range of projects and has been on many fieldtrips with BGS

scientists both in the UK and abroad. He has photographed landslides and coastal erosion, ground water flooding in action and he has even found safe(r) ways to photograph geohazards such as sinkholes.

He has also found himself in some challenging environments such as training photographers at the Afghan Geological Survey in Kabul or being stood on top of glaciers in Iceland.

Sometimes the weather has its greatest impact as he explains:

"Most of the fieldwork, whilst always interesting, seems to be either freezing cold or red hot! There's no point photographing in the rain as the photographs are usually poor and it can damage equipment. I think some of the BGS staff claim I'm water soluble!" "Whilst in Iceland, battery power was hugely affected by the cold. I had to warm the camera batteries in my gloves otherwise they'd go flat. In other places, such as Afghanistan, dust storms are more of the issue as dust particles can easily get inside the camera and onto the sensor. Before you know it, there's a speck on every photograph."



Chilly

Up, up and away!

Paul is also a pilot and has taken light aircraft up into the sky to capture photographs of events such as the flooding in 2007. Large parts of England were under water at this time including Tewksbury Abbey in Gloucestershire; Paul's photograph won him the Press and PR 2007 award.



Left: Paul Witney as pilot. Right: Tewksbury Abbey, Gloucestershire, surrounded by the flood waters of 2007.

His latest equipment purchase is a hexacopter. This is an unmanned aerial vehicle, also known more widely in the press as a 'drone', and is similar to the one used by BGS's <u>Earth</u> and <u>Planetary Observation and Mapping and Engineering Geology teams</u>. This will mean Paul can take aerial photos and video at, for example, locations where it is too dangerous for anyone to walk over, such as a landslide or sink hole, or where flying aircraft is also not an option. The UAV is a DJI S900 with a hi-resolution camera capable of capturing stills up to 16 megapixels and video up to 4k.



The new Hexacopter

In the lab

Sometimes, it's the smaller aspects of science that need to be photographed. Here you can see Paul using specialist equipment (Nikon Multiphot and 80 megapixel scanning back) to photograph <u>trilobite</u> eye facets:



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The YouTube Generation

BGS is trying to put more video footage of our science in action on the web. The public's demand for video is increasing so Paul now spends a large part of his time shooting and editing videos of the science at work. You can view some of these videos on <u>BGS's</u> <u>YouTube Channel</u>.

Paul has won several awards for his work including the <u>British Institute of Professional</u> <u>Photography</u> Annual Print Competition, Architectural Section, for the last two years. To see more of the work Paul does, you can follow him on Twitter <u>@bgspixpaul</u>



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