

Shooting SLR video with Berkley White

By Peter Rowlands

This article is going to be a little different in that, in order to get the most out of it, I will ask you first (if you are online reading this) to click this link and watch the video clip

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As someone who shoots primarily video underwater I have been watching with interest the new capability of shooting HD footage with the latest SLR cameras. As a result I have been keeping an eye out for clips on the web taken with them and came across Berkley White's footage shot in Cayman of the wreck Keith Tibbetts.

What struck me instantly was not the image quality of the footage (which was excellent) but the beautiful camera movements and steady shots throughout the clip. I have always thought that shooting video with an SLR in a housing which was designed to shoot stills would not work well with video and I wanted to know about Berkley's experience shooting the Canon 5D in an Aquatica housing.

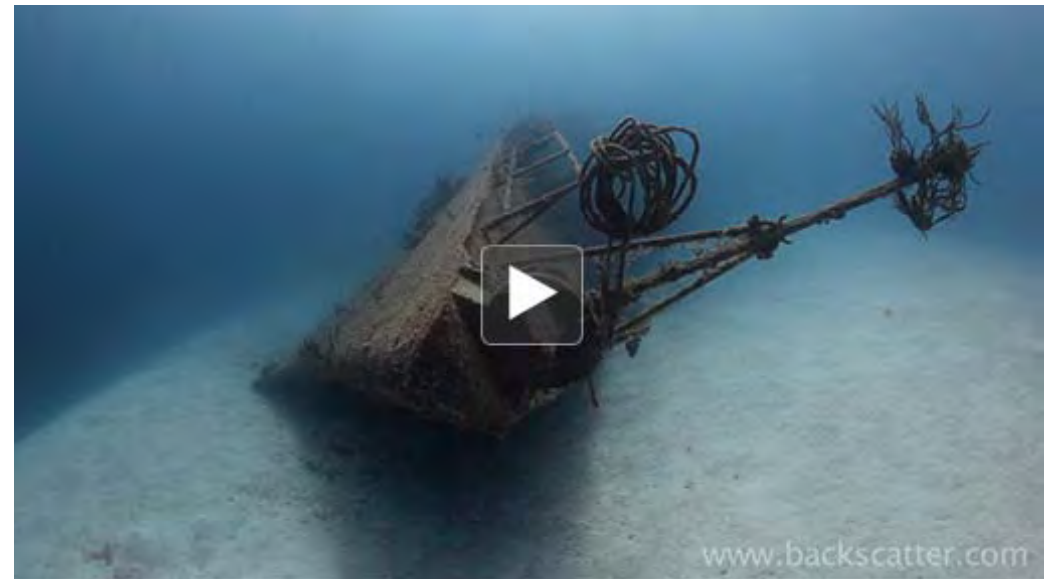
Berkley is the owner and founder of Backscatter in Monterey and I have known him from way back so I e mailed him and asked if he would write an article for UwP about the techniques he used. Berkley's time schedule couldn't fit that in but he suggested I interview him on the phone and write up the article myself.

The result was a hugely enjoyable 20 minutes on the phone with him after I had forward e mailed the questions I was going to ask so he had time to think about his responses.

The following is a transcript of our conversation:

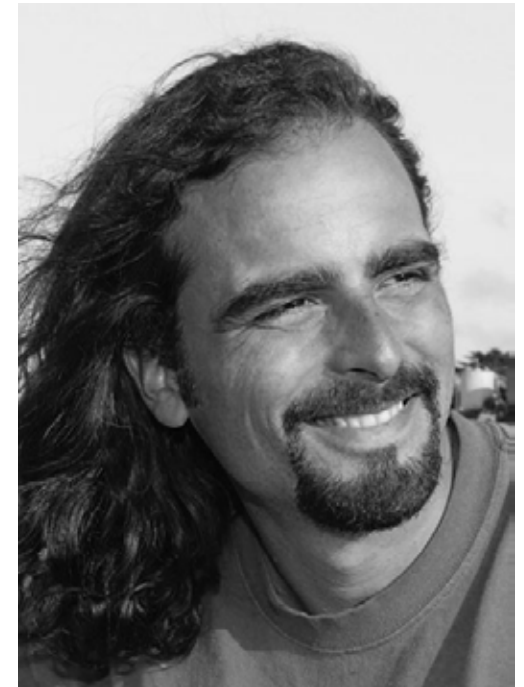
PR - As a video shooter myself, I've followed your SLR clips on the internet with great interest but I was honestly blown away (and jealous!) of the footage you shot on the wreck Keith Tibbetts in Cayman so I thought I'd contact you to chat about the SLR video format and getting the best footage out of it.

BW – Firstly that's a very kind compliment coming from you and I really appreciate that.



I'm very excited about the new capability of SLR video. The ability to shoot fully manual exposure has not been available on traditional consumer camcorders and it's closer to the capability of much higher end video cameras such as the RED and digi Betacam. But equally as important is the ability to now shoot fisheye lenses. Up until now I had always felt that consumer video cameras couldn't shoot wide enough and it was really this new capability which sparked my interest to shoot video again.

PR - Having the ability to shoot stills or video with the new high end SLRs is very convenient. Do you use your Canon 5D MkII to shoot stills as well and, if so, how do you prepare mentally to use of each one? i.e. only shoot video





one day then stills the next or switch from one dive to the other.

BW - I completely fail when I switch from one to the other so I get my best results when I shoot the same for multiple days in a row. It reminds me of when I used to shoot stills with a wide angle rig and a macro rig on the same dive and I would get shots that were all mediocre but if I dedicated myself to one or the other and got my brain into groove I would get much better results. And now with video I find it's exactly the same so much so that I will shoot video for multiple days and maybe at the end of a trip I might shoot some stills. It is a sacrifice and I feel I am missing out on some excellent still shots but if I didn't dedicate to video I wouldn't get good footage.

PR - Are there any drawbacks with the SLR for shooting video? LCD viewing, ergonomics, controls? Your recent clips show amazingly smooth camera movements. Would you be prepared to

let us know how that was achieved?

BW - The ergonomics of an SLR are not totally unlike a conventional camcorder housing in that you have 2 handles on a small box and the hardest technique is to avoid rotational wobble and that takes extreme concentration. Stabilisation plates help dampen the movement but if I'm not mounting the housing on a scooter I'll use a tripod bracket that we make which allows three legs to be added to the base of the housing. I take two of those legs and stick them out to the left and hold them in my left hand and my right hand will be on the housing controlling the camera. That wider grip is a tremendous help in preventing wobble but it still requires good diving practice and concentration so that's why I now use scooters a lot, not necessarily for propulsion but because the extra mass creates a much steadier inertia for me to push or pan with. The added benefit of the scooter is that it can also fly you around when you want but it's most important asset is its stability.

PR - With the Keith Tibbetts dive in particular, there were 2 of you shooting. Can you remember the total amount of footage shot and how did you manage to get such a popular wreck without divers on it?

BW - The footage we ended up using was just from my camera and during the one hour dive I shot about 15 – 18 minutes. The biggest challenge on that dive is we had a boat load of 14 other divers all on the same wreck and when we arrived there was another boat of disabled veterans who were being helped along the side of the wreck so it was very congested.

Having the scooters was key. We were able to scoot down to the bow before anyone else got there to get that opening shot and then when the other divers came down we would use the scooters to shuttle ourselves to get on the other side of the wreck away from the divers. The scooters were absolutely essential for that.

And my other trick, which I almost hate to share, is that I really monitor my air consumption because

what I have found is that the first 7 minutes and the last 7 minutes of a dive are the best opportunity of getting shots without other people in them.

PR - Do you get involved in the editing also? If so is that an enjoyable process and what computer/software do you use.

BW - Oh boy, I wish I could pass the editing on to someone else! The hardest part with video is having to watch all of your clips and log them accurately. This footage was shot during a Digital Shootout and we try to push ourselves and our clients to edit their video every day so it makes for long days. What I do is preview the clips using Photo Mechanic or Lightroom in Quicktime and tag the ones I want to keep. Then I convert them to Apple ProRes 422 and I use MPEG StreamClip which is a free converter that I find is much more intuitive than Apple's Compressor. I then drag the clips into the timeline in Final Cut Pro and rearrange them into



some sort of cohesive order and then either output them as high res 422 or at lower res for the web.

I am getting used to Final Cut Pro now but it took some time for me. The most important thing is to tag your clips on a daily basis whereas with stills I might wait until I get home.

PR - If you found an editor you could trust, could you leave them to do this for you so you concentrate on the shooting and they do the editing?

BW - That would be a dream come true! I would love to work with an editor who was into the underwater environment and its subjects as I am. I would much prefer to shoot the material and have someone else

do the editing as I'm not fully into computers so I would love to hook up with someone who is much more into it and faster at it.

PR - Hopefully when this article is published you'll get contacted by a bright young editor who's itching to work on underwater material.

BW - Oh that would be great and I would definitely make it worth their while!

PR - How do you see the future of video shooting underwater. Do you think we will see cameras and camcorders merge in design so that can shoot both offer good ergonomics or do you think the camcorder makers will up their still quality.

BW - We're starting to see interesting interchangeable lens cameras like the Sony NEX that are on the right path being able to shoot high quality video and stills but ergonomically they are quite awkward with a small body and a big lens. With the optics available for SLR cameras they will continue to be popular for underwater use but I do see the converging capabilities continuing in that the most popular cameras underwater will all have the ability to shoot both stills and video. However there will always be a place for the conventional camcorder which has better ergonomics, sound capability and accessories for the high end user.

PR - Berkley, that's been great and I'm sure our readers will find your experience and knowledge of great use. Thanks once again.

BW - The pleasure was mine!

Peter Rowlands
peter@uwpmag.com

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Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping the full rewards.

These three photos are all taken of the same wreck in the Red Sea. The left hand image was taken on slide film, which rendered the scene completely blue. The middle image is taken with a digital SLR without a filter, using manual white balance. The white balance has brought out some of the colour of the wreck, but it has also sucked all the blue out of the water behind the wreck, making it almost grey. The right hand image is taken with the same digital camera and lens, but this time using an original Magic Filter. The filter attenuates blue light meaning that the colours of the wreck are brought out and it stands out from the background water, which is recorded as an accurate blue.

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