Big and Small

with Dustin Adamson

From humpback whales to nudibranchs, tiger sharks to flamboyant cuttlefish, Dustin Adamson has shot it all. In this interview, Dustin shares key insights on the gear he uses, as well as his process and workflow for creating stunning underwater films.

Q: What's your Current Primary Camera System?

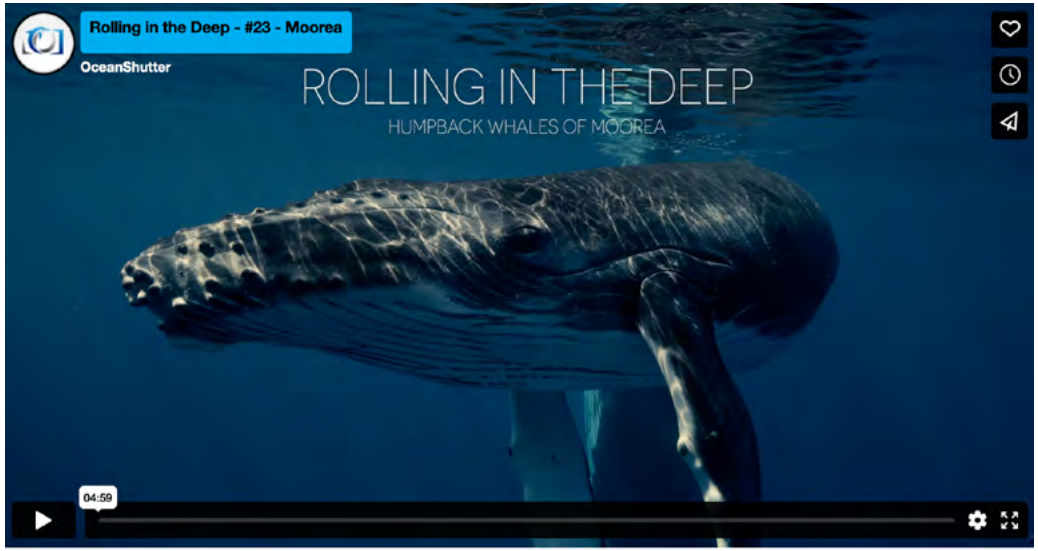
A: Previously I have worked with the Canon 5D II, Canon 1DX II, and Canon 1DX III cameras. In the last year I have moved to the Canon EOS R5 C which I LOVE! The ability to utilize Canon's custom white balance through pressing just 1 button is a huge deal for me and my wide angle work. In my opinion, Canon has the best underwater color of any camera out there. Having one button to achieve correct white balance at depth has really been a game-changer for me. The 8K RAW isn't something I use a lot of, but it is nice to have when a shot calls for that type of flexibility in post as well as extra resolution. Another side benefit for me is that this camera doesn't have a mirror box (it's a Mirrorless Camera), so cleaning the sensor on this camera is significantly easier than my previous cameras. Here are some other details of what I use for my primary rig:

Canon EOS R5 C Camera
Nauticam NA-R5C Underwater Housing
Nauticam NA-502S Housing
Canon RF 100mm ƒ2.8 L Macro lens – For macro work
Canon RF 14-35mm ƒ4 L Lens – For wide angle work
Nauticam SMC-1 Super Macro Converter Lens
Backscatter Macro Wide 4300 Video Lights for Spot and Snoot shots with the Optical Snoot OS-1
Xit 404 Tripod Legs

Q: It looks like you had some epic whale encounters in Moorea! Tell us about what went into making a compelling edit from your stunning combo of aerial and underwater footage.

A:I had the opportunity to join the Backscatter group trip this year, and it really exceeded all of my expectations. The accommodations, in water guides and private boat were really top notch. Topside Moorea

is the most beautiful place I have ever been. The sharp green volcanic mountains are a spectacular sight to see. I incorporated a lot of drone shots in the edit, some of which tested the drone's limitations. I was fortunate enough to get some aerial shots of the whale inside of the lagoon without feeling the need to bring the drone and launch it on the boat. It's against the rules for swimmers to be with the whales in the lagoon, so that enabled me to get some clean shots without people in the shots. When we were in the water, it was a mixed result on the encounters that we had. You have to swim a minimum of 300 feet (100 meters) to reach the whale. This



meant there was a lot of swimming! Sometimes that paid off, other times not. I was happy with the 6 days on the water. This gave us enough opportunities to get good shots in a variety of different conditions, and also shots without people scattered in the image. The private boat with only 6 people that Backscatter arranged was crucial in getting some of these shots without dozens of other swimmers in the frame.

Q: What sort of challenges did you encounter when shooting such massive subjects?

A: Large subjects can be tricky. You want to get the whole body in the frame, but you also want to be as close as possible for a clearer and sharper image. The further away you are, it will degrade the image quality because of the visibility in the water. There is a balance there that you have figure out. Of course, you can't swim towards the whales, they have to come to you. We were fortunate to have some young calves that did many very close passes. They were smaller than the adults and fit in the frame easier being closer.

Because there are likely to be a lot of other swimmers from other groups, keeping people out of the shot can be challenging. You really must work on your positioning to avoid swimmers in your shot. Pay attention to swimming patterns from the young whales and position yourself to avoid those angles. Sometimes there isn't anything you can do, and you just have to work with what you can. I would use my zoom on my lens to help cut the field of view smaller which allowed me to cut some of that out. Also, I shot the entire trip in 8K with the intention of a 4K final project. This gave me a little bit of cropping ability to help with this as well.

Q: Tell us about your camera settings, lens choice, and other equipment considerations to be set for success under these conditions?

A: I used the Canon RF 14-35mm L lens from Canon on this trip. I find it to be a very nice rectilinear lens that has some flexibility with the zoom. You aren't allowed to bring lights on this, and quite frankly, you wouldn't want to. You can't get close enough, and there would be too much drag in the water for swimming. Normally in this type of a shoot, open ocean and blue water, I would take a custom white balance off of a gray card. For this shoot, I used the 8K RAW option on my camera, so manually white balancing wasn't something that I needed to do. I don't normally shoot in this mode, but this situation called for that. The RAW files are huge! So it isn't something I shoot, unless there is a reason. White balance with these video files was done in post-production in Adobe Premiere. As for camera settings, I mainly was around

ƒ13 and ƒ11, with a 1/120th shutter speed. ISO was set at 160 to keep the file as clean as possible. For canon users using ISO levels in multiples of 160 is the cleanest way to shoot. For example, 640 is a cleaner ISO than 500 ISO, despite it being higher.

Q. In your Puerto Galera episode of Rolling In The Deep, you feature more of the classic black background and directional, snooted macro lighting that made us love your content in the first place. You recently added the Backscatter Macro Wide 4300 video light to your gear locker. What sort of impact has it had on your macro video?

A: It has been a huge upgrade for me! My previous lights struggled to maintain a consistent light color (Kelvin) between the lights. As someone who is a little obsessive regarding color, this caused me a lot of frustration over the years. The light on these is very consistent across different lights. The Backscatter Macro Wide 4300 video light is super easy to use. The batteries are easy to charge. They also don't have corrosion issues that other lights have with charging points. The spot light is perfect for isolating your subject to help create those black backgrounds.

The Optical Snoot OS-1 is an excellent tool that gives you the flexibility to shape the light and can be helpful on certain shots. I have used a homemade one in the past, but the Backscatter Optical Snoot OS-1 has permanently retired my old homemade one!

Q: Your Tiger Beach experience looked like a ton of fun. Given that it is a relatively shallow dive, with extremely close encounters with very large subjects, what sort of lens and lighting options did you consider and ultimately decide on?

A: Tiger Beach is an amazing destination! In my opinion it is the best in the world for shark photography. We had the opportunity to join Epic Diving for our 2nd trip to Tiger Beach. In this type of a trip you want to make sure you go with someone that has your safety as the #1 priority, and they do exactly that. They will put you in the right spots to get the shots you are looking for in the safest way possible. If you have never done this trip, I would highly recommend it.

Tiger beach is just a sandy bottom at 25 feet (8 meters) deep. The water is normally clear and currents are low. The tigers are reliable from November to May. You will also encounter many other species of shark on the dive, so there is never a dull moment. They will come up and nudge you so you need to be comfortable redirecting them with your camera or hand.

Lighting is easy on this dive. I have always shot with natural light, and I prefer that for most wide angle anyway. It is shallow enough that even if the sun is behind clouds, it is generally still light enough for a nice shot. I have never felt the need for

external lighting on this dive. Because it has white sand nearly everywhere, the sun reflects off of that and lights up the underbelly of the sharks, so it really helps the overall lighting of the subjects. One of the trickier aspects is that white sand being clipped for being too bright on the screen. Make sure you have your exposure settings set to counteract that and if you have zebra functions on your camera or monitor make sure you have them on.

Q: We love your finished videos because they all contain a strong story, told only through compelling images. Give us a quick breakdown of your post-production workflow and what goes into taking raw footage from the camera and turning it into an engaging experience for the viewer.

A: My Post production really breaks down to this. Rating clips, Film type, Music Selection, Edit, Color Correction, Exporting.

Let's dive into each one of these:

Rating Clips.

I go through and rate each clip that I shoot. I give them letters on usability in film or stock footage. This also gives me an opportunity to see what I have before I start on a full edit.

"A" clips are nearly perfect clips. Great color, behavior, steady, good angles, lighting, white balance, etc.

"B" Clips are good clips that can be used but they might suffer from a little bit of shake on the footage, perhaps the lighting isn't perfect, or even the animal isn't the best representation of that particular species. Overall good clips, but they could be a little better. These often get added into my final edit.

"C" Clips – Good clips that I could still use for stock footage. May require some work to look usable.

"D / F" clips – Generally unusable clips that I end up deleting.

Film Type

Now that I know what I have clips wise for the trip, I decide what type of short I am going to make. Is it a music video? Something with a story and narration? Something with sound effects? Depending on this, is how I choose music based on what I am looking to accomplish.

Music Selection

Music is a HUGE part of any production. If you have bad music it can ruin the whole thing. I spend many hours searching for an appropriate piece for the project that is licensable for use. It has to be something that I like, because I will hear the music literally 100's of times

during the editing process. The music needs to mirror what you are trying to convey with the film. Do you want it adventurous? Calming? Sentimental? Those are tones that you set with the music.

Editing

When it comes to editing, I normally lay out my music on the timeline and start editing to that. Generally, I select really engaging shots to begin the film with. Something gives you that 'Wow' factor when you first see it. In most videos, I will try to group like creatures together. For example, Cephalopods, Crustaceans, Sea Slugs etc. This gives sort of an order to the film. I also try to use some transition shots to switch to a different type of animal or switching from macro to wide angle. I also pay attention to what clips I want to play during certain parts of the music. Perhaps I might match some behavior to specific points in the music.

Color Correction

Once the film is basically laid out in the timeline, I will color correct each clip. Fortunately this doesn't take me long. I try to get the color and white balance right in the camera so that minimal work needs to be done in post production. I typically make minor adjustments in white balance if needed. I usually increase contrast on most clips, and add a little sharpening on wide angle shots. To color correct a five minute film, it normally only takes me 30-40 minutes. Of course if I am using RAW 8K files, it takes a bit longer

as working with RAW is more labor intensive and harder to achieve a look that I am satisfied with. I do have a LUT that I use that gets me close, but I end up doing tweaks to it on nearly every clip. I typically don't use proxy files.

Exporting

The film is done except for final export. I will export depending on what is required. Youtube, Vimeo, film festivals, and even home use for myself, I will create different exports for each one. Maximizing the quality based on what the top limits are for the final destination.

Many thanks for your open and illuminating answers.

Dustin Adamson Dustin Adamson is a multi-international award winning underwater cinematographer. He was certified to scuba dive back in 1996. Based out of Salt Lake City, Utah, he is completely self taught, and has been filming since 2011. In 2002, he married his wife Tyra Adamson, an accomplished underwater photographer in her own right. They both own and operate oceanshutter.com. He loves variety. However, he still enjoys filming all underwater creatures. Having traveled all over the world, he is always searching for the perfect shot. In 2015, Dustin had the honor of being invited to be a member of the Ocean Artists Society.

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