Kelvin Aitken

SHOOTING TOPSIDE

While taking underwater photos may be your goal during your next dive weekend or extended vacation, it would be silly to ignore the fact that a lot of 'topside' images are going to be taken. Also, often your contact with marine life is limited to surface or abovewater photography. Let's look at a few issues and techniques you can easily master to ensure that the 'other' photos are as successful as your underwater shots.

Let's look at a few common topside encounters you'll probably face on a dive trip: seals, whales, birds and divers. There are others (Komodo dragons, turtles, jumping pelagic fish, flying fish, overly enthusiastic dive masters, etc) but our shortlist will provide principles you can apply to all situations you come across. Let's start with a moving subject, as they provide particularly challenging issues.

Imagine you're on your dive boat motoring across the ocean to a distant destination. It is possible you'll find marine life during the journey, a common encounter being seabirds. There you are on the back deck of the dive boat with an albatross or red tailed tropic bird or some other feathered wayfarer. You whip out your camera and blast away, hoping for the best. If you're using a compact digital camera with a live video feed to the back LCD screen you'll find that the perfect moment to push the shutter approaches, arrives and departs before the camera can react. It's hard enough to get a well-composed shot with a responsive SLR camera without having to deal with a shutter delay of one or even two seconds.

The solution is one that sports photographers use all the time: prefocus and anticipation. If you're waving your camera around all over the place trying to track your wandering albatross there's a good chance you'll accomplish nothing. Most seabirds will follow a boat for a decent amount of time, so relax for a bit and just watch the pattern the bird sets up. It will return to certain points during it's curiosity-satisfying meanderings which you can target for your final image. It may be part of the boat wake or a point in the sky where it always turns to swing back behind the boat. Steady yourself with your camera aimed at the predestined point and, as you see the bird returning to the 'hot spot', take your image. If you have a shutter lag you can time your shutter release so that the bird is in the frame. You will chop a few wings off or beaks or feet, but with a bit of practice you'll nail your subject.

Birds: As an exposure, this image file just manages to hold things together. The highlights on the bird's head are just about to blow out but a slight underexposure has held it in. The white deck of the boat manages to reflect enough light up into the bird's belly to give a reasonable fill light and remove the blue reflecting up from the ocean surface. You can see the blue from the sky on the upper neck of the bird. Fill flash would have cured both problems plus put a sparkle in the dull eye. Since the boat and the bird were traveling the same speed, auto focus worked just fine with the focus point set off to the right of centre.

A common problem with marine birds is that often they are brilliantly white, either completely or partially. It is very easy to burn out a seabird as the contrast between the highlights in the bright feathers and the darker beak or other plumage can be too much for an average exposure to handle. Check your histogram to make sure the image is not being clipped in the highlights. You may also have the feature of a flashing highlight in the thumbnail image where highlight clipping is occurring. If clipping is occurring, switch to manual exposure (or if you only have auto functions, change the exposure compensation) so that you are underexposing by about 1/2 to 2/3 of an f-stop. That should pull it back into a useable range.

If you're shooting RAW format (and I'd like to nag you again about saving the RAW file even if you do save a jpg as well) then the overall darker image can be lightened while still saving the highlight detail. In extreme cases, and if the image warrants the extra work, you can blend a number of RAW file conversions with different exposure settings to hold both shadow and highlight detail, as outlined in an earlier article in this series.

Another problem with white seabirds is that the underside will be illuminated by light reflecting off the ocean or the boat. That's why sometimes you will see a bird image with a green belly. Not the right colour, but a true record of the colour of the light falling on the underside of the bird. This can easily be fixed by either using fill flash (which may not always be practical due to relatively slow sync speeds) or in post production. To fix the colour cast in your photo editing software, select the area with the colour cast. In Photoshop or Elements, use the standard Lasso tool with the Feather option set to 2 pixels. Yes, you can use a softer edge if you wish but for most applications, 2 pixels is just fine. Less than that is not recommended as you'll have a hard line between your adjustment and the untouched remainder of the photo. You can convert your selection to a layer (Layer>Layer Via Copy) if you want to save your adjustments for later use, but in most cases that's not an essential step. You can also create a layer that records the actual colour adjustment by choosing Layer>New Adjustment Layer>Color Balance.

With your selection done, go to Image>Adjustments>Color Balance. Yes, you could also use Curves or one of the other colour adjusters, but for simplicity we'll just use the Color Balance option. If the underside of your bird is a yukky greenish yellow then try the Green/Magenta slider. Or fiddle with the Red/Cyan as cyan is generally the colour that is bouncing around. You can also try opening the Curves dialogue box and use the middle eye dropper tool. Click on the area you want to be neutral in colour and it will make the adjustment for you. You may need to click around in a few spots until you get a pleasing colour adjustment.

With the colour adjustment done, deselect the area then use the History palette to go back and forth from the original to your finished masterpiece to check the adjustment has been done to the right degree.

Another common problem with photographing birds on the wing is that often the auto focus will jump to the wings, leaving the all important eye of the bird out of focus, or less than optimally sharp. With a point and shoot camera your only option is to use as high an f-stop as possible to maximise the depth of field. With an SLR you will usually have the option of choosing a focusing point. Select one that is off centre, around where you intend the bird's eye to be situated. It is not easy or foolproof but it will swing the odds in your favour.

Photographing dolphins in a boat wake is similar. Watch what they're doing and you'll find they prefer a particular spot in the wake. Aim and focus your camera there (usually, holding the shutter button half way down will trigger the auto focus and auto exposure functions) and watch for the dolphin(s) to begin to surface. The dark bodies in the wake wave begin to become clearer as they surface, less water being between you and the animal. You'll often have a one-second warning of the dolphin breaking the surface so even a camera with a shutter delay can still 'get the shot'. With a good playful group of dolphins there's many opportunities to take shots. Resist the temptation to run from one side of the boat to the other,

Dolphins: A high shutter speed and prefocusing just in from the stern wake ensured this image was tack sharp. If you photograph the dolphin right in the churned wake, the camera will tend to under-expose a touch, but that's preferable to blown-out highlights – and with a RAW capture you will pull back all the shadow detail. If you have dolphins approach your boat, a shot looking back from the stern will give you a head-on view, much more attractive than a 'bum shot' of a dolphin off the bow.

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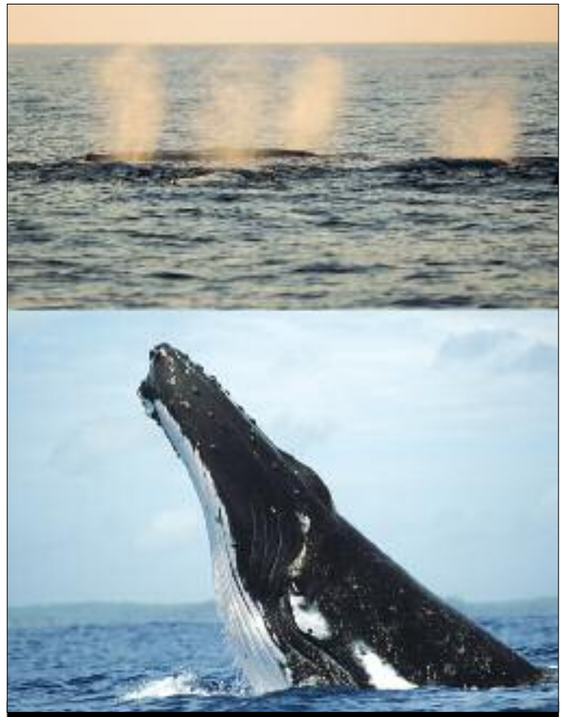

Whales: From a distance, while whale sightings can be exciting, you will only get the "floating log" type of image. Even with the blows from these Sperm Whales (top) at sunset adding interest, they are still just black logs. Getting much higher, if possible, will give you more shape and depth to the animal, or even better, wait for the moment when the whale rises above the surface, either to breath, raise it's flukes in a dive or (bottom) breaches.

playing a game of 'Whack-A-Mole', as you'll have a better rate of success by employing teeth-gritting patience.

A mass of foam from the boat wake will tend to underexpose the image file a touch – not such a bad thing as it will usually keep any important highlights on the dolphins from burning out. You often get specular highlights on the dolphin if its a sunny day, as they retain a sheen of water over their skin. A previous article showed you how to get rid of the nasty chromatic aberration that is usually found on specular highlights. Check the links box below to access all previous articles in pdf format.

Seasonally you'll encounter whales. The excitement of a whale encounter will ensure lots of photos being taken. The result is usually a thin black line somewhere on the distant horizon. It is amazing how our brain 'zooms in' on a subject so that we think we're much closer than we actually are. In addition, by law in most countries, there's a restriction on how close a boat can approach a whale. So if the whale is behaving in a typical whale-like fashion, you will only see a slim strip of dark blubber on the surface. The only solution is to get closer and shoot down on the whale. Whale watch boats can be quite large, allowing you to scramble to the upper deck which will help the situation a lot. Also humpback, southern right and minke whales are often very curious and approach boats if they are in the right mood. Again, patience and being prepared will give you your best opportunities.

Anything that the whale does to raise it above the surface will provide better photos. Head raising, spy hopping, pec fin slapping, fluking (raising the tail) and breaching all contribute to a better photo. The only issue with breaching is that the vertical movement of the whale necessitates a very high shutter speed to freeze the motion. On the plus side, you will get away with a shallow depth of field due to the distance of the subject – unless the whale breaches 2 metres away. In the past I mentioned the rule of thumb where the minimum shutter speed is roughly equal to the lens focal length. So a 200mm lens needs 1/250th second shutter speed, at a minimum, to provide a sharp image. However, with digital cameras, which provide grainless image files (unlike scanned film files) and are therefore less forgiving, the smaller chip size effectively making the lens 'longer', a moving boat AND a moving animal (15m of leaping whale) calls for a much higher shutter speed. I'd recommend that a point and shoot camera should be set on ISO 400 and a shutter speed 3x the focal length. An SLR will be best served with the same 3x factor, though you'll probably get away with an ISO 200 setting on a sunny day. So if you're using a 200mm zoom at the 200mm setting, then a shutter speed of 1/1000 of a second would be the minimum setting; 1/2000 would be even better.

Seals: Fur seals are almost black when they first emerge from the water. Anything but flat front lighting will turn them into a black hole. Photographing dry animals, such as these two pups, will show more detail in the fluffy brown fur. Getting lower and placing the pups against a light background, such as the sky, would have improved the separation of the subject from the background. And a bit of fill flash would have put a sparkle into the rather flat looking eyes.

Most dives are also social events so the inevitable dive buddy shot will be taken. A dark wetsuit and bright background can cause all sorts of problems, as will harsh midday sun with the inside of a mask turning very dark. Flash fill will bring out the details. This example shows flash fill slightly overdone. The upper part of the frame is not filled by the subject – also wearing a dark wetsuit – all of which tricked the strobe into putting out too much light. The light on the face is a little too bright giving it a garish look. Dropping the flash exposure down half an f-stop more would have made it look a little more realistic.

Let's consider a snoozing seal. This is a much simpler subject as they don't move much when on land. Depending on whether they're wet or dry, a fur seal can be either pitch black or a dark to light brown. The main thing to watch is the contrast. A wet dark seal on a white sandy beach will tax your camera chip to the limit. This is where a good quality RAW file is invaluable – in this extreme situation; an exposure that just holds the highlight detail in the sand can be manipulated to retain the highlight detail while bringing up the darker animal.

A seal can be a murky blob, as they can blend in with the rocky shore to a remarkable degree. Shooting from low down so they're contrasted against the sky is one option. Filling the frame will also help. Always remember that you can get away with a shallow depth of field if the eyes are sharp. Also, a dark seal with dark eyes may look a little flat. Use some flash fill to put a sparkle into the eyes. Even a little is better than none. Just don't overdo it. Too much fill flash can make even the cutest seal look like an accident from a nuclear attack!

Where divers are the subject, the main technique that serves you well is the ability to control your fill flash. It will save your mates from suffering 'panda eye' under a harsh midday sun, where the brows throw dark shadows over the eyes. Again, don't overdo it. Usually, fill flash set to at least one f-stop under the main exposure is a good place to start. Check your camera manual on how to do that. My 'magic' setting for fill flash is having the strobe 1 2/3 f-stops under the main exposure. That will provide a nice sparkle to the eyes while stopping the shadows from blocking up without totally eliminating the natural shading and shadows of direct sunlight. Even people shots taken on flat overcast days can be improved with a touch of fill flash, adding a little contrast and sparkle to eyes and smiles.

> LINKS
http://www.divetheblue.net/photography.php
http://av.adobe.com/russellbrown/CurvesAdjustments_SM.mov
http://www.bairarteditions.com/pages/tutorials/photoshop/layadjust.html
http://en.wikipedia.org/wiki/Shutter_speed

CONCLUSION

- With high contrast subjects (such as white seabirds), keep the highlights in check.
- Settle on one spot in which the animal is likely to appear and prefocus.
- Get the eyes perfectly sharp.
- Avoid the 'black log' problem with large whales by getting close and high.
- Use a very high shutter speed to freeze vertical motion.
- Horizontal motion allows you to use a more reasonable shutter speed. Remember that a bird following a boat or dolphin playing in the wake is moving at much the same speed as you and your camera, so a shutter speed to freeze camera shake is probably a good place to start.

Happy shooting and remember that patience, practice and perseverance will serve you better than relying on random chance.