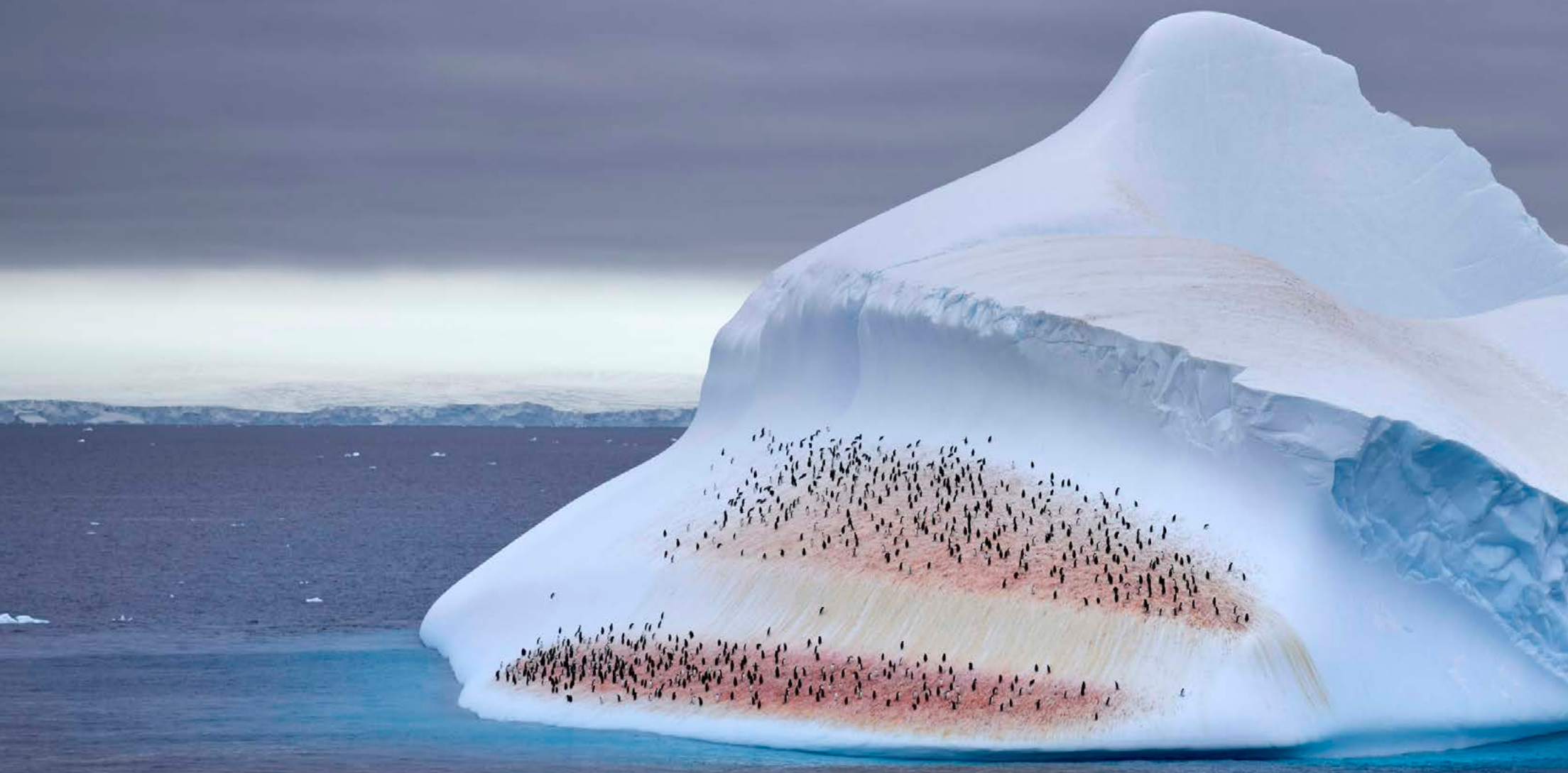


Polar

Photography
Primer



Peter Eastway

INTRODUCTION

Photo: Mark Horspool



The Poles are bucket list destinations for many photographers, so whether you're travelling way down south or up to the far north, you'll find both polar regions are incredibly photogenic. You will take the photos of your life!

Usually the first question photographers ask is how their

cameras will survive the cold temperatures? The good news is that most voyages to the polar regions stay on the water and near the coast, so the temperatures don't get down too low – maybe -10°C. This might sound incredibly cold for some readers, but once you've been there for a few days, it's not that bad! Really!

It's only when you travel inland or up to higher altitudes that the seriously cold temperatures have a significant impact on our gear.

Several years go, Nikon Ambassador and irregular contributor to *Better Photography* magazine Mark Watson worked out from first hand experience that his Nikon cameras worked pretty well down to -28°C, after which some erratic camera behaviour could be observed from time to time! There was probably some erratic behaviour from Mark as well!

However, it is unusual for polar adventurers on an expedition ship to experience such low temperatures and if it did get that cold, you'd only have to survive for a few hours on a shore walk or Zodiac cruise. After that, you're back in a warm cabin having a hot chocolate.

Rest assured, your digital camera will handle life in the polar regions.

However, keep a spare battery in a warm pocket because batteries tend to run out of 'oomph' more quickly when it's cold, but they also recover some of their charge if you warm them up. Hence the idea is to be ready to swap batteries if you're out in the field for extended periods.

You also want to keep your camera out of the water – don't drop it overboard as it will sink! You also need to be aware of airborne sea spray and water splashes, so wipe your camera down after your trips outside with a damp cloth. Simple care of your cameras will keep them working longer.

On the following pages, we'll talk in detail about keeping your cameras safe on the trips between the ship and the shore, look at what equipment you should take on a polar adventure, discuss exposure and shutter speeds, and lots of tips and suggestions to ensure you come home with a collection of amazing photographs!

We'll also look at some simple post-production skills that should ensure your images look fantastic, plus some ideas for creating a portfolio of your work – I don't see much point going to one of the polar regions and not producing something to boast about, whether it's just to friends and family or the local camera club.

And I've included a small portfolio of some of my favourite polar photographs taken over the years.

I hope you enjoy this little introduction to the wonderful world of polar photography.

Peter Eastway



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KEEPING YOUR CAMERA SAFE

No one plans on getting their camera gear seriously wet, but in the polar environments, it can happen if you're not prepared!

When Does Your Gear Get Wet?

Polar photography is generally outdoors, although you can get great shots from your cabin as well. And while it's not likely to rain, snow and sleet can quickly turn to water and give your gear a good soaking.

Mind you, precipitation isn't a big problem because the water is fresh. The more hazzardous challenges come from salt water: breaking waves, water splashes and sea spray.

Salt water is relatively easy to manage when you're on the ship itself. Most of the time as you walk around the decks, there simply aren't any issues to deal with – it's photography as normal.

However, in windy conditions when the light looks fantastic and you simply have to stand out in the elements, your camera can be quickly coated in sea spray and mists. This is really just a minor inconvenience and is easily fixed back in your cabin with a damp towel and a good wipe down. After all, our modern cameras are all weather-sealed, so you should feel comfortable about photography from the ship's deck.

However, when you leave the ship to go ashore, or take a zodiac cruise in between the icebergs, things can be different. It might be a beautiful day with clear skies and not a breath of wind when you leave, but for how long? One thing that makes the polar

regions so exciting is the changeable weather and within a matter of minutes, you can find yourself in strong winds and choppy waters.

Off Ship

It's nothing to be alarmed about in terms of personal safety, but you may find your cameras are exposed to airborne spray and wave swells with water splashing over you and into the zodiac. Water can also collect in the bottom of the zodiac.

While it's rare to get seriously wet, you should plan on at least one zodiac excursion where sea spray and wave splashes will wet your cameras and camera bags.

Personally, a little water won't worry you because you'll be wearing Wellington boots and warm, water-shedding clothing, but cloth camera bags can soak up salt water, which is not great for the bag or the cameras and lenses inside.

It is very, very unlikely you will fall into the water with your cameras, but you could slip on the rocks when clambering ashore. So, given it is unlikely that your cameras will ever be dropped into the water, do you need a fully waterproof camera bag, or can you get by with a solution that will handle the elements and just shed the water?

For me, what we're really protecting ourselves against are splashes, spray and the camera bag soaking up salt water.

So, what are the options?



You don't need to be ashore to take great photographs, just out of your cabin and up on deck to take advantage of great light when it happens, Antwerp Island, Antarctica.

USING YOUR EXISTING BAG?

Most readers will have more than one camera bag and probably a particular favourite. It is already kitted out to hold all your equipment. Can you use it in the polar regions?

Special Polar Issues

You can certainly use an existing camera bag, but here are a few thoughts that might change your mind.

First, taking all your gear on a shore landing or in a zodiac cruise might not be necessary or advisable. Often our camera bags are full of little accessories and tools that we rarely use, or extra lenses that might not be used very often. To make your photography more enjoyable, I recommend you pack lightly and just take the essentials with you. So this probably means you're going to have to rearrange your existing camera bag anyway.

Holding Your Bag

Second, will you be able to put your camera bag down on the ground to change lenses? Sometimes the weather is so foul that you won't want to open your camera bag! And putting your bag on the ground means it could be inundated with snow.

Cleaning Your Bag

There are also restrictions from time to time when you're not allowed to sit, kneel or place anything on the ground (e.g. the Avian Flu protocols in 2023 and 2024). If you have a backpack

design bag, can you swing it around and access your camera gear without putting it on the ground?

Third, how old is your camera bag? Actually, that's not the right question: how dirty is your camera bag? There are strict environmental protocols in place all around the polar regions and you will be asked to clean your camera bags to make sure there are no seeds or plant material. If you've taken your camera bag around Australia's great outdoors, for instance, getting rid of all those tiny grass seeds can be a long and laborious job – and don't think close enough will be good enough if you're going to South Georgia because they are so serious about biosecurity that too many problems with dirty bags (and clothing) may mean everyone on your ship is banned from landing.

Would it be easier to take a new, perfectly clean bag instead?

Keeping Dry

Assuming you will use your existing bag, how do you keep it dry (if it is not already weather proofed)?

A large plastic rubbish bag will do the trick, but make sure it is never lost overboard or let go in strong winds. Another option is an inner lining bag used to protect the contents of general backpacks. They are made of thin, but stronger plastic and while they can be fully waterproof, you really only need them to keep your bag dry. The inner bag becomes an outer cover for your camera bag, but there are easier solutions.



Both the Arctic and Antarctic are more than just beautiful wildernesses – they have wonderful heritages of exploration, remnants of which remain visible even today. An old water boat, Half Moon Island, Antarctica.

HARD WATERPROOF CASES

Yet another option is a Pelican (or similar) waterproof hard case.

The advantage of a hard case becomes apparent when you're shooting in the Zodiac. Access to the case is quick and easy, good for inclement days when you're taking out and putting away your cameras regularly to avoid the weather or rough water. I remove most of the dividers and store two cameras with lenses attached. And there's room for a spare lens (if it's safe to change lenses), batteries, memory cards and so on.

Quick Access

In tricky situations, the advantage of a hard case is that it is very quick to put your cameras away (if the weather changes or the zodiac driver has to get a move on) and there's no worry about water on the floor of the zodiac soaking into the case because it's made of plastic.

Unfortunately, there wouldn't be room in the zodiac for everyone to have a hard case. This would be a very unusual situation, but if you have 10 people and a driver in the zodiac, there's possibly only room for three or four hard cases – so if you bring a hard case, also bring an alternative.

However, you will discover the downside of the hard case design when you get ashore because it is a pain to cart around. Who wants to carry a suitcase on a walk? A backpack or shoulder bag is much more sensible!

And in any event, at some locations you're not allowed to put your camera bag on the ground, so a case is not a good solution for shore explorations.

MultiBag Design

Yet a further option is a Pelican or similar hard case with a backpack inside. SKG in the USA makes such a combination. When doing a Zodiac cruise (no landing), it's a great combination.

However, when doing a shore landing, the backpack with cameras goes inside the hard case for the ship-to-shore transfer, and once on shore, the back pack comes out and the hard case stays behind with the shore equipment – until the return journey.

This works and doesn't work. At some locations, you're not allowed to put anything on the ground, so this is no longer possible. And on other occasions, especially in the Arctic, you may do a walk from one location to another, so you can't leave the case behind.

I use the SKG hard case still, but it's only one of my solutions (I also have a simple dry bag). I still like the hard case for the zodiac cruises, even if I can't always use it on shore. However, I have a very expensive medium format camera outfit which might make me a little more sensitive to camera safety.

So, in summary, a hard case is probably not the best solution.

What is?



Everyone is different in how they approach post-production. Here the SS Guvernoren, a wrecked whale factory ship, has had its rusting hull lightened to produce a much stronger red colour.

DRY BAG BACKPACKS

My current thinking is that the best solution for the polar regions is a dry bag backpack. No, the backpack doesn't need to be fully waterproof (because we've already decided we're not going to fall overboard, or if we did, the last thing we will worry about is our camera bag). We only need a bag that will protect our gear from spray and splashes, plus it needs to be comfortable to wear/carry.

The problem with these bags for photographers is that they are normally just one big compartment with no padding either on the outside or the inside.

There are exceptions to this design rule, like Lowepro's Dry Zone bags which in theory are fully waterproof, even if there's a zipper right around the bag. I have one of these bags and they will certainly do the job for some photographers, but I struggle to fit in my camera with a telephoto lens attached. I also found the zipper very stiff and slow to operate – it probably needs to be stiff to be fully waterproof, but I need quick access to my gear and so I'm back to the simpler dry bag design where you just roll the top of the bag over itself to make the seal.

So, how do you keep your cameras and lenses safe inside these bags? How do you stop them from knocking against each other, or from knocking against the side of the ship as you jump back on board from the zodiac?

One solution will be found onboard in your cabin: bathroom

towels! Another is to use the dividers from your normal camera case – the velco often lets you cobble together an improvised protection system. Or you can purchase some small padded bags or cases to put inside.

The Aurora ship shop has sold a suitable dry bag for US\$99 (the price may have gone up and I assume it is still available). It is a tough rubberised bag with a couple of outside pockets for a water bottle and big enough to take my Fujifilm X-H2 with a 150-600mm lens attached. I also throw in one of my Phase One cameras with a wide-angle lens.

In the bottom of the bag, I place a small towel. I put the Phase One camera into padded pouch with its own padding. Plus another towel for extra padding.

The first time I used this system, I didn't have a choice because the rules for taking bags ashore had changed, but I actually found it very serviceable.

One use for your tripod is when you go ashore, you can hang your backpack onto the tripod and get access to what's inside. Of course, this now means you have to carry a tripod, so perhaps it's easier to turn to a friend and ask them to hold your bag while you get your cameras out or put them away.

Camera straps for your cameras are essential.



One of the advantages of shooting from a zodiac is that your camera angle is already very low, bringing you to a similar level to your subjects – and I think a much stronger viewpoint. Walrus, Svalbard.

CONDENSATION & OTHER THINGS

Condensation can occur when coming from a cold environment into a warm one – moist warm air settles on cold cameras and lenses and condenses, forming a film of water over all surfaces. How does this impact photographers on a ship?

Naturally enough, inside the ship it's warm, so taking your warm camera out into the cold is not going to create condensation.

On the other hand, if you've been out for a shore walk or a zodiac cruise, your camera gear could have cooled down quite a bit. When you come back into your cabin, condensation could form on your cameras, so the solution is to leave the camera equipment in its camera bag and allow its temperature to gradually equalise (or the condensation to evaporate).

On very cold days, it's a good idea to leave your cameras in the bag for 30 minutes to an hour, allowing everything to warm up. This should prevent condensation forming.

So, what happens if condensation does occur? It depends on where it forms.

If on the lens, no big problem, but your photos will look very foggy unless you wipe it off the front! Use a lens wipe!

On the outside of the camera, no dramas, give it a wipe as well! But on the inside of the camera, it could short the camera's circuits and prevent it from operating – in which case, turn the camera off and give it an hour to acclimatise.

One of the challenges will be when you return to the ship, walk into your cabin and look out the window, only to see something amazing that you just have to photograph! So, your camera

comes out, condensation forms and you start taking photos... actually, in my experience this rarely happens. If it does, just wipe the condensation off the lens and keep shooting – you'll know if there's a problem because the viewfinder image will look a little misty!

Temperatures

So, how cold does it get on a polar excursion? While the poles can be the coldest places on earth, where we visit we're on a ship and along the coast – where it is relatively warm. Yes, it's cold, but you'll get used to it in a few days. Temperatures might reach -5°C regularly and with wind chill, maybe -10°C to -15°C. But in the middle of the day, often the temperature is +5°C and regularly warmer.

The coldest I've had was around -20°C and that was deep in a fjord in Greenland, so quite some distance from the coast and the warmer ocean waters.

Rain Cover

When it's snowing, a rain cover for your camera can be useful as the snow will eventually melt and wet the camera. However, it's rare that it will rain (but it can happen).

As we're usually only out for a few hours at a time and our cameras are weather proofed, I generally don't worry about a camera rain cover, but I do keep one in my camera bag.



In the polar regions, it's not just the sky that is constantly changing, but the sea as well. Here at Astrolabe Island in Antarctica, we pushed through a thick slurry of grease ice. It looks like you can walk on it, but you definitely can't!

YOUR CLOTHING

Most polar cruises will include a warm jacket as part of the travel package. I'm not sure exactly why, whether it's because all the other tour companies do it or if it's just safer to ensure your guests will be warm by providing them with a jacket that is guaranteed to work. It's true that a lot of people travelling to the poles have never experienced really cold weather before, so their idea of a warm jacket might not be warm enough.

Water & Wind Proof

Generally speaking the jacket is either two or three layers. The outer layer is Gortex or a similar water-resistant material. While it probably won't rain, snow will settle and melt on you while outdoors and then there's the inevitable sea spray and wave splashes. The outer layer keeps you dry and doubles up as a wind break too.

Underneath, the jacket may have one or two layers of warmth. The basic premise for polar dressing is layers. It can be really cold, but it can also be pretty warm and so dressing with layers allows you to modify the level of warmth you need for a particular day or location.

Underneath the jacket and its layers, you can have as many extra layers as you want. I take two thermal singlets, one short sleeve, one long sleeve. I can wear one or both. Then I have a shirt or a light fleece. As you can get dressed and undressed two or three times a day, I've given up on shirts with buttons and now use a fleece with a front zip.

Then you can have one or two heavier fleeces or jumpers, depending on how cold you feel. I always wear more than I think I will need because you can always take gear off, but if you haven't got an extra layer with you, it can be a cold ride back to the ship!

Footwear

Keen walkers will probably want to take their favourite walking shoes, but depending on the season (and how much snow is underfoot), this might not be the best approach. But everyone's needs are different, so this advice might not suit you.

I wear the Wellington boots – also called muck boots – that are supplied by the ship. They are just under knee-high rubber boots and you need them to get off the zodiac because you're invariably landing in shallow water with a few small waves washing through. They are not the best for ankle support, nor the most comfortable, but they work very well. Two pairs of sock, one knee high, and you're in business.

Gloves are necessary and there are lots to choose from. I use undergloves from The Heat Company most of the time. There are fingerless gloves and mittens which will make using the camera easier while keeping your fingers warm.

Add in a warm beanie, sun glasses, lip balm and you're almost there. You probably won't need ski goggles out in the zodiac (although some of the drivers use them) and the ship shop will usually sell you what you've forgotten.



It looks wild and woolly – and it was! Within a few hours, the placid Gerlache Strait turned into a spectacular wash of waves and spray, photographed safely from the deck of the ship.

WHAT EQUIPMENT?

If you're reading this, you'll be taking a DSLR or mirrorless camera. Interchangeable lenses are highly recommended as they give you a range of perspectives and the potential to capture images that are different from the regular passengers' smart phones!

If you have medium format, bring it! There is a ton of detail to capture and the extra bit depth is put to work capturing the subtle shades and tones of the snow and ice.

Lenses

You probably have all the lenses you really need and the decision might be which lenses to leave at home. However, before lightening your camera bag too much, think a little about how you will be working.

To begin, you'll have a cabin where you can leave all your equipment in safety for the duration of the voyage, so if you're not sure about a lens or a piece of equipment, and you're not exceeding your luggage limits for travelling, bring it anyway.

A lot of your photography will be from the decks of the ship, so a wide-angle is great for capturing the weather while a telephoto will bring closer distant landscapes and wildlife. Changing lenses is as easy as returning to your cabin if you're not carrying your camera bag around with you.

When you go ashore or on a zodiac cruise, you'll probably limit your equipment to two lenses – and possibly two cameras.

Changing lenses in inclement weather can be challenging, so if you have two camera bodies, each with a lens attached, so much the better. And it also means you have a back-up camera.

A wide-angle zoom is useful for atmospherics and icebergs. The zodiac is a wonderful camera platform and you can be literally centimetres away from icebergs as you cruise around. On shore, a wide-angle can make the most of a stony or icy foreground with a magnificent landscape behind. Wide-angles are great!

At the other end, a 100-400mm telephoto zoom gives you a lot of opportunities with both wildlife and landscapes. You'll probably see one or two photographers with 500mm or 600mm prime supertelephoto lenses on board and while wonderful lenses to own and use, they are relatively heavy and unwieldy. And when the ship or zodiac is moving around, it can be difficult to keep your subject within the frame if the telephoto effect is too strong – hence a 100-400mm (35mm full frame equivalent) focal range seems to be a great balance.

Having said that, there's a new generation of 100-500mm and 150-600mm zooms which are incredibly sharp and much lighter than the prime supertelephotos. While I love the shallow depth-of-field I can achieve with a 300mm or 400mm f2.8, I've decided I'd prefer to have a 150-600mm zoom as it provides greater versatility (and if I really want a softer background, I can do it in post-production).



A great example of the light being spectacular in the middle of the afternoon. Yes, we normally like shooting at the ends of the day, but in the polar regions, the sun might never set. Don't worry, the light will still be magical from time to time.

Many photographers already have 28mm to 200mm focal lengths and these are undoubtedly usable, but they don't necessarily give you a viewpoint with a difference. Similarly, prime lenses with wide apertures (like a 50mm f1.4) are great to bring along, but you may not use them very often. It's generally the really wide and really long lenses you'll use the most.

Tripods and Filters

There's not much point using a tripod on board ship, unless it's just holding your camera up while you're waiting for polar bears to approach! However, when you go ashore there can be opportunities for long exposures and spending time with the wildlife. (Be aware that from time to time, visiting restrictions may mean you can't use your tripod. Your expedition team will tell you when.)

Similarly, ND filters for long exposures aren't going to work until you get ashore, in which case both the tripod and ND filters can be wonderful to use.

A polarising filter is worth bringing along, allowing you to look beneath the surface of the water into the rich aqua blues and greens under the icebergs. And a UV filter on the front of your lens won't go astray as there's likely to be plenty of UV on sunny days.

Don't forget plenty of memory cards and spare batteries. Batteries will run down more quickly in the cold, so a spare battery kept in a warm pocket becomes a part of your daily uniform. And you should probably have another two batteries back in your

cabin on the charger as the days can be very full.

Video Too

You should also consider taking a video camera as this can expand your enjoyment of the experience and, in turn, allow you to share more of what you found upon your return. Most DSLR and mirrorless cameras have video built in, so it's just a matter of remembering to use it.

Small point-of-view video cameras like GoPros and the Osmo Pocket 3 are also worth investigating. Or you can just use your smart phone – the results can really be quite stunning. There are lots of ways you can incorporate video into your presentations when you get home.

Post-Production

One of the joys of ship travel is having time to open your laptop and process your photographs on board. It's true that you can also check your equipment is working and your sensor is clean, but editing your work as you travel from one destination to the next with a drink or snack by your side is an enjoyable luxury!

Before getting on the ship, make sure your copies of Lightroom or Photoshop will open and operate without needing internet connection, and it's worthwhile making sure you have the latest versions as well.

Finally, bring one or two back-up drives as you're very likely to fill up your computer's hard drive!



One of my favourite shots. I have much closer photographs of polar bears, but this one places the bear in an otherworldly environment and the tessellated ice is wonderful! Kraemerpynten, Svalbard.

CORRECT EXPOSURE IN THE SNOW

In the good old days, getting the exposure right for snow scenes was a problem. These days, it's relatively easy, especially if you can keep an eye on your camera's histogram.

Exposure Basics

Cameras use a light meter to determine the correct exposure. Simplistically, it averages all the tonal values in a scene (all the whites, blacks and greys) and sets them to a 'middle grey' tone average. Of course, some parts of the scene will be lighter, others darker, but as an average, it works pretty well.

Modern cameras have far more sophisticated metering techniques, including face, subject and scene recognition, so you're much more likely to get a correct exposure.

So what's the problem?

Well, imagine if you were photographing a plain, grey wall. Your camera's meter would give you an exposure that shows the wall as a middle grey. Perfect! However, now imagine you were photographing a pure white wall. What tone would it end up? The answer is not white, but grey, because the meter averages all the tones to grey.

Modern Approach

So, in theory, your camera might underexpose a snow scene in the polar regions, because it is fooled by all the whites. However, when you open that file in Lightroom, ACR or Capture One, etc., you can easily adjust the exposure so the snow looks white again.

Of course, not all your polar photos are going to be of just snow and ice. There will be sky, sea, rocks and animals as well. So,

there's one approach you can take that will ensure every photo is correctly exposed, every time.



Use The Histogram

The histogram is a graph that shows all the tonal values in your photograph. The trick is to ensure that the graph doesn't touch the right side of the histogram box.

The right side represents pure white and if any tonal values are recorded as pure white, they can be difficult to rescue when you edit them. Yes, you can make white areas a light grey, but you can't bring back the detail and texture.

If you take a photo and the histogram is in the middle of the graph, you have a good exposure and you can adjust how light or dark the image is later in post-production.

On the other hand, if the histogram is touching the right side of the graph area, then you should use the exposure compensation control to give less exposure (try -2.0 EV).

Of course, if the histogram is way down to the left, this indicates the image is underexposed (too dark) and so you would add exposure compensation (+2.0 EV).

As long as you keep that histogram under control, you will always be able to produce photographs with correct exposure and detail in the ice and snow.



The main issue with snow is ensuring you retain detail and texture, otherwise it just looks like flat areas of white paper (or white screen). Keep an eye on your histogram.

KEEP AN EYE ON SHUTTER SPEEDS

Many subjects in the polar regions are relatively still – floating icebergs, nesting penguins, mountain scenes. However, if you're photographing from a moving ship or a zodiac, you're also constantly moving, not just in one direction, but often up and down with the waves and swell too.

Blur can occur because the subject or the camera moves during the exposure. Normally, we don't want blur!

To understand the effect of shutter speeds on blur, let's start with two extremes.

At 1/2000 second, the shutter is open for such a short period of time that a flying bird will be recorded clearly. In comparison, a shutter speed of one full second would record the bird as an elongated blur.

Of course, the bird will still move during the 1/2000 second shutter speed, but the amount of movement is so small that the human eye doesn't perceive it under normal situations. In other words, a small amount of blur isn't a problem. Even quite a lot of blur can be hidden in a small reproduction (say an Instagram post), but blur becomes more evident as the reproduction size gets bigger (such as a poster print).

Moving Subjects

Exactly how short or brief a shutter speed needs to be in order to freeze the action and record a moving object clearly depends on many factors: how fast is the subject moving; is the subject moving towards or away from the camera (in which case the

subject's relative size and position in the viewfinder isn't changing much), or is the subject moving across the field-of-view (in which case the position of the subject is changing within the viewfinder); how close are you to the action; and how still is the camera during the exposure?

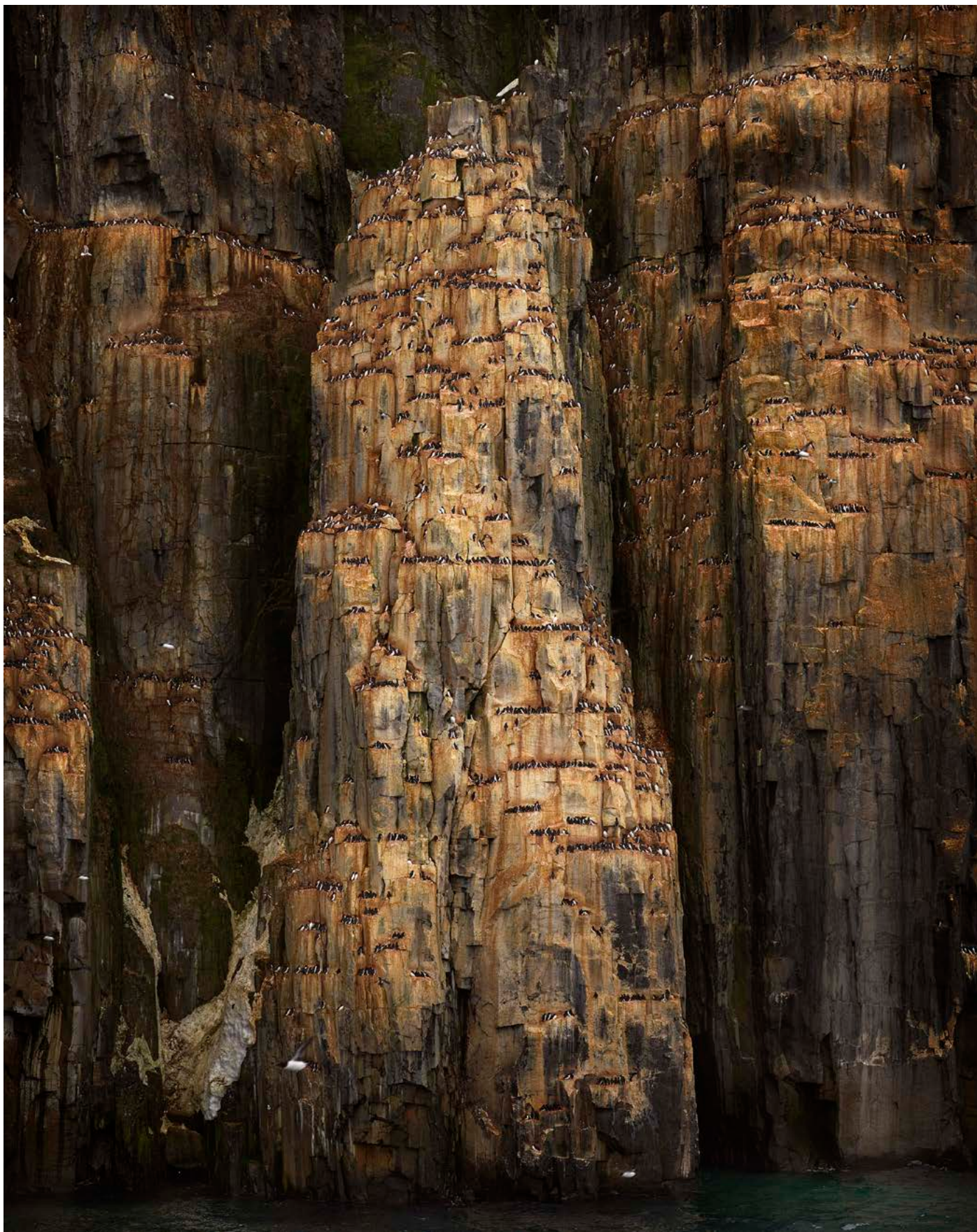
On a ship or a zodiac, we are rarely able to hold the camera completely still. So, there's movement all the time and we need to be aware of it, even if it's not a problem.

Many cameras and/or lenses have optical image stabilising features which detect camera movement and introduce an opposite movement in the lens or the sensor to counteract the blur. The result can be a significant improvement in the 'hand holdability' of your camera.

However, don't be fooled by the advertising hype that says you can take sharp photos with image stabilisation up to five or six stops/EVs. This maybe the case when standing still on solid land, but on a moving ship or zodiac, things are a little different! It will help, but maybe not that much.

For most moving subjects, a shutter speed of 1/500 or 1/1000 second will freeze the action nicely. Birds in flight will need at least 1/2000 second because they move so quickly.

Shutter speeds from 1/30 down to 1/2 second are in the danger zone: danger from camera shake and danger from subject movement. Your best advice is to change your camera's settings (increase the ISO or select a wider aperture) so you are shooting with a faster shutter speed.



Alkefjellet in Svalbard is an area of towering cliffs on which Brunnich's Guillemots nest in their tens of thousands. Post-production has been used here to darken the cliffs either side of the central tower.

INVISIBLE EDITING

Our post-production should be invisible.

I'm not naive. When people look at photographs today, the first thing they ask themselves is how much Photoshop – or post-production – has been applied to an image?

Everyone knows about Photoshop, or if not Photoshop specifically, the myriad apps and programs that can edit and change photographs. In fact, if a photograph looks too good or too perfect, the first assumption is that the image has been doctored in some way that is probably inappropriate.

Enhanced

This is a sad state of affairs. Photographs have always been 'doctored' or enhanced. Unlike painters who begin with a blank canvas, photographers have had to put up with what they placed in front of their camera and, sometimes, reality wasn't exactly what they wanted. So if it were possible, if it were necessary, the photograph was changed. Enhanced. Improved.

Of course, this doesn't apply to scientific, documentary, sport and wildlife photographers who wish to capture reality exactly as it is, but most other genres look to 'improve' on reality. Think of family portraits, weddings, architectural studies, fashion, beauty, advertising, food, travel... It is generally expected that the photographer will present an idealised view of the world.

So, where does this leave your photographs of the polar regions? What approach should you take?

What I find interesting is that if an image is doctored, some

critics consider it to be less of a photograph than one that is raw. Yet this summation is completely at odds with the reality of the photography process.

Every photographer has the right to choose how he or she approaches photography. If you wish to use images straight out of the camera without further post-production, that is your right and I would support it wholeheartedly.

Equally, if you want to composite one hundred different images into a single frame, that's also up to you.

Photography Is A Language

Photography is a language and there are many ways it can be used.

So why is it that some photographers feel a need to criticise photographs that have had a post-production workflow applied to them?

If the post-production is awkward and unfinished, such that the changes disrupt the photograph itself, then such criticism is warranted. Bad technique, whether in the camera or from editing should not be applauded.

However, even expertly edited images are disparagingly referred to by some critics as 'fake' or 'cheating'. Why?

A non-fiction writer might not have much interest in fiction, but generally they don't dismiss fiction simply because it's not real. Nor do they claim that their non-fiction pursuits are superior to the fiction writer. Both approaches require great skill. Different skills



The background mountain hidden in the sea mist wasn't really there, but the idea came from what I experienced many times on this wild weather day. The base image is strong, the hint of a mountain in the background takes it across to the realm of art rather than record photography.

that can be appreciated by all.

I think there are a number of reasons that people are wary about photographs.

Whether correctly or not, society believes a photograph to be a depiction of something real. The vast majority of photographs are record shots. Think of all the images taken with smart phones and then add in all the advertising for cameras that promises to capture things 'just the way you see them'.

Assumptions

Cameras are amazing devices. They are capable of capturing very accurate representations of reality, yet when looked at critically, more often than not the image captured is quite different to what our eyes perceived.

We can interpret a photograph to be a reasonably accurate representation of reality. We have learnt how to 'read' photographs and to make a lot of assumptions about what it represents.

However, this trust in the efficacy of photography is misplaced. It has never been possible to know for sure exactly how different a photograph is from its reality.

Think of an action shot of a penguin jumping into the water, freezing a spray of droplets of water – it might be reality, but not one that we have been able to experience first hand. Think of Frank Hurley's famous black and white photographs we fondly look back upon as being accurate representations of their times – except I don't know anyone who sees in black and white.

I wonder if some people decry post-production as the devil's work simply because they have yet to learn the simple skills needed to do it themselves?

Nevertheless, there is a difference between a 'straight' photograph and one that is edited. Unfortunately, defining the difference between one and the other is subjective. Minor post-production for one photographer maybe too much for another.

There is no agreement on where the line between 'real' and 'enhanced' sits.

Straight Or Real?

So, is there a difference in the value of one approach over another?

Let's compare capturing a photograph in camera and creating a photograph with post-production skills.

The former is a matter of observation, framing and timing. There can be great skill in setting up the camera correctly, choice of lenses, lighting and then the nuances of pose and expression. There's no doubt capture is a craft and if you add in a healthy dose of imagination, you can be incredibly creative.

Some photographers like to stop here, leaving the rest of the image creation to the camera and its automatic processing. This is a valid approach. It's like the non-fiction writer.

Additional Steps

However, creating a photograph may include all or just some of these capture skills and then add on additional steps in post-production. The resulting image may no longer represent reality because the photographer's imagination has taken it to another place. This is the fiction writer.

I don't think it is fair to say the post-production process automatically makes photography easier or that it is cheating. If anything, photographers should be applauded for using their imagination to take the image further – assuming the resulting image has been beautifully crafted. Poor post-production technique should be dismissed just as quickly as a poorly exposed photograph.

Rather, let's put our photographs in the normal context of everyday imagery, such as we'd see on television, in advertising and even the photos of our families on the wall. Post-production isn't cheating, it's simply a different way of creating a photograph.



How far can you change an image before it loses its authenticity? For a start, this is a strong black and white, just like (but of course not as good as) Ansel Adams, but hardly real. And then I have lifted up the clouds just a bit, because I liked the composition better. So, in my mind, it's real, but of course, technically it is not.

There may be elements of fiction within non-fiction, but this is no reason to discount it.

Honesty

Post-production requires just as much imagination and skill as capturing a finished result in camera.

What I would like to encourage is both approaches to photography in the polar regions. And honesty.

There are some genres of photography where the public expects an image to be 'real'. If they see a penguin standing on an iceberg, they expect the size of the penguin relative to the iceberg to be real. If you reduced the size of the penguin to make the iceberg seem larger than it was in real life (something that is very easy to do in post-production), then that is disingenuous.

We have a contract with society which says that in some contexts, our photographs should not be tampered with, at least not too much. So, where does this leave us? Is it okay to post-produce our photographs or not?

Yes. There are very few photographers who take their images straight from the camera without editing the file. It's the amount of editing and how it is applied that matters.

For some, a quick wash in Lightroom or Capture One is all that's required to turn a raw file into a masterpiece.

For others, that masterpiece takes a little longer, sometimes with lots of composite and adjustment layers in Photoshop. And while most people can agree on the extremes (edited or not edited), none of us agree on how much editing is allowed.

Or do we? In some ways, we all agree. If the post-production cannot be seen, then it's probably allowable. If we look at the image and all we see is the photograph, then the post-production has been successful.

Of course, sometimes we 'just know' that a photograph has been edited. It might be the extra shape and drama in the sky, the

crispness of the sheer face of an iceberg or the sheen on wet rocks by the sea. Post-production can make things look more 'real' than the camera can on its own and, as we become more experienced, we can perceive the techniques.

Invisible Photoshop

'Invisible Photoshop' (or Invisible Lightroom etc.), is when the post-production techniques are hidden within the photograph. The viewer might figure the image has been edited, but they can't put a finger on exactly where or how much.

But Invisible Photoshop doesn't mean the image has to be believable. If you have a penguin flying next to an albatross, the result has to be so convincing that you question the reality (is that really a penguin?) before you question the post-production.

For me, photography is a two step process: capture and post-production. I believe photographers should be capable of both processes, but only because the post-production allows them to complete the creative process more fully.

There are many reasons why professionals may only capture images and leave the post-production to someone else, but in the context of pictorial, art and amateur photography, why would you leave out what is arguable the best part of all?

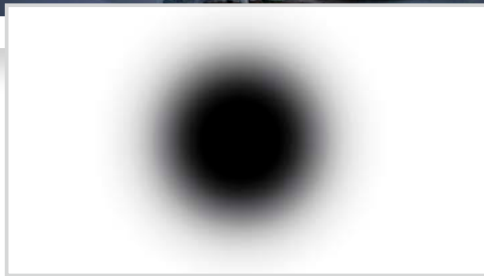
Making your photographs sing.

And on a voyage to the Arctic or Antarctica, there is lots of cabin time to process your files. Taking a laptop loaded with your favourite editing software is a must. First, you can check your files each day to make sure the camera is working properly (better to know at the time that the focus is out, rather than getting home to discover it). And second, you can do some preliminary edits, getting your files into shape for the portfolio projects that will follow.

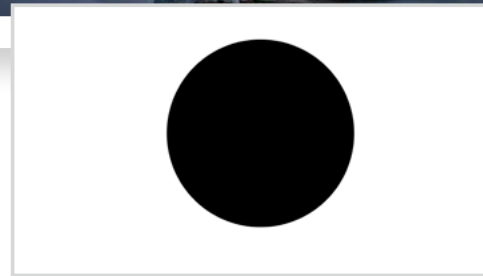
While post-production can be a very personal approach, following are some essentials that we all need to follow.



This photograph was carefully edited to stay within the rules of the nature section of the Australian Institute of Professional Photography's awards. It won first place both at a state level and nationally, but it is not a 'straight capture' in that I have used post-production to give a little more life to the flat light. For some, the change might be too much, highlighting the difficulty of making rules about photography.



A large (3000 px) brush with Hardness = 0%. The lightening of the centre of the image is noticeable, but not where it stops and starts.



The same large (3000 px) brush with Hardness = 100%. The lightening of the centre of the image is now obvious and unsatisfactory.

THE USE OF BRUSHES

When you make a localised adjustment to a photograph (such as darkening a sky or lightening up a foreground), you have to deal with the edge of that area.

If the edge of the brush is too abrupt or 'hard', it is very easy to see the technique (as shown in the examples above). On the other hand, if the edge of the brush is blurred, feathered or 'soft', it is difficult to discern where the adjustment begins.

Invisible Photoshop (or Lightroom etc.) requires us to make localised adjustments in a way that our handiwork cannot be seen.

Photoshop, Lightroom, Capture One...

In most editing programs, we can use a brush tool to determine where our localised adjustments will go. In other words, we use

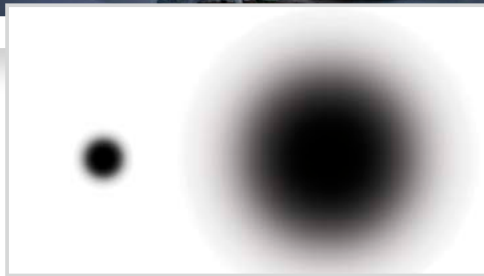
the brush to paint over the sky we wish to darken, or over the foreground we want to lighten.

In Photoshop, we are using the brush on a mask. A black area on the mask conceals the effect of the adjustment we're making, a white area on the mask reveals it. What's important is the transition between the white and black areas.

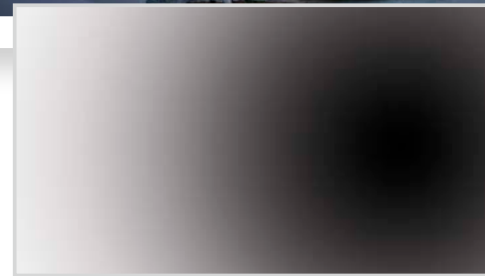
In Lightroom and Capture One, the same principle applies when painting in the adjustments or using the graduated filter. The use of the brush and its softness or hardness determines how gradual the transition is.

Size and Hardness

The brush is used to paint in large or small areas. A large brush



Even if your brush is set to Hardness = 0%, a small brush (left) can have clearly defined lines. This is sometimes necessary, but be aware!



Making the brush really big (up to 5000 pixels) with Hardness = 0% can produce very gradual transitions from white to black.

makes the job quicker, but a small brush can be essential when adjusting fine details.

If you are wanting to lighten up an iceberg, you probably want to use a brush with a hard edge so you can accurately outline the iceberg's sharp edges (or use a subject selection feature instead). In comparison, if you wanted to lighten up the middle of a landscape, a large brush with very soft edges is more likely to be used.

In both cases, the size and the hardness of the brush are changed to suit the subject and the type of adjustment you wish to make.

In some programs, you can also adjust the opacity and or the flow of the brush. These affect the speed and subtlety of the adjustment areas you are defining.

One useful trick in getting the most out of your brush work in post-production is understanding that the softness of the edges you produce is controlled not only by the hardness setting, but by

the size of the brush as well.

Small = Hard

A large brush with a Hardness of 0% has a very large 'feather', while a small brush with the same Hardness of 0% will have a much narrower feather in absolute terms.

To produce very broad, soft transitions, consider using very large brushes. In Photoshop, you may wish to reduce the size of the image on the screen to make it easier to apply a very large brush stroke.

In many ways, even with the new subject selection features, brushes are the most important key to an Invisible Photoshop technique. The use of your brush determines how the adjusted area will sit with the rest of the image. If you can see where the adjustment begins, separately from the subject it is adjusting, then you have not been successful.

DON'T DARKEN THE HORIZON TOO MUCH

One of the most common adjustments photographers make to their images is to darken the sky.

The most obvious solution is to select the sky and to darken it down, using the horizon line as the border.

The challenge with this approach, especially if you make a strong adjustment, is that the land below the sky can look artificial.

If you look at skies in nature, they are usually (but not always) lighter towards the horizon, and the land below is darker than the sky.

However, if you darken down the sky too much, all the way to the horizon line and without also darkening down the land below it, the result can look contrived. The more strongly you darken the sky, the more obvious the effect because the land below simply doesn't look right.

Another more practical problem using the horizon line as the border for your adjustment is that it can be very difficult to select. In the example here, the horizon is quite simple, although the building breaks it. Compare this with a horizon covered with trees and it is much more difficult to create an accurate, believable mask.

Rather than using the horizon as your absolute border, think of adjusting it with multiple masks.

Initial Selection

It's very straightforward in most apps these days to select the sky – it is done automatically. In the Arctic and Antarctica, there will be many landscapes where the sky is expertly selected at the press of a button.

So, we have our sky selected, we darken it down (for example) so the sky at the top of the image looks right, but because the

mask covers all the sky, the area just above the horizon might not look believable.

So, undo some of the darkening you have done and this time concentrate on the sky near the horizon. Darken it, but only so much as to make it believable.

Second Selection

Next, make a second selection of the sky (you can copy the mask or do it again). Darken down the sky at the top so it is how you want it.

Now, work on the mask itself. Using a large, soft brush or a gradient filter, cover up the area near the horizon so the darkening effect of this second layer is removed and gradually reduced.

In this way you have the best of both worlds – a sky that's automatically selected and an adjustment to make it very believable.

Graduated Filter or Mask

A lot of photographers use the gradient filter or brush (in Photoshop, Lightroom or Capture One) to darken the sky.

This works much like a graduated neutral density filter, but the problem is you have a straight transition area which may not match the shape of the horizon.

There are no absolutes when it comes to editing techniques, but a straight transition edge may not be suitable for horizon lines that have trees or buildings intersecting them, simply because the tops of the trees and the buildings will be darkened as well.

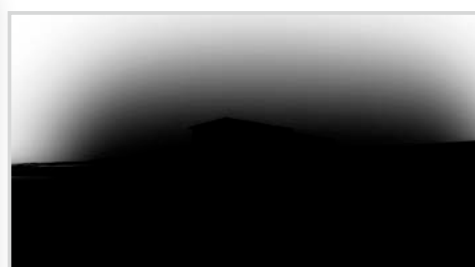
The usual solution when you do have subjects breaking the horizon is to use the automatically selected sky mask and adjust it as explained above.



Let's assume we want to darken the sky in this barren Arctic landscape.



Using a one-step mask creates an unrealistic horizon area – the sky is too dark and doesn't look believable.



A two step process darkens down the area near the horizon first, then adds more darkening in a second layer up top.

VIGNETTE WHAT IS ALREADY THERE

The easiest way to create a vignette is with a vignetting tool. However, vignetting tools use a regular shape (a circle or a round-cornered rectangle) and if you apply them too strongly, the resulting effect simply looks fake.

However, the idea behind vignetting is a good one.

The viewer's eye will rove around the photograph and if there are light areas on the edges, this is an invitation for the viewer to leave your photograph. To keep the viewer inside, many photographers suggest darkening the edges.

You don't have to darken all four edges. Some edges may already be quite dark enough.

Similarly, you don't have to darken just the edges, but you could darken elements that surround the image naturally.

In the example above, the sky at the top of the frame is quite light and takes attention away from the icebergs below. Darkening all four edges may have helped contain the image, but it's not

really necessary to darken the bottom of the image because it is already quite dark enough.

However, note the shape of the clouds that are already in the sky. There is a natural diagonal cloud front with a darker area above.

Rather than darkening the top of the image horizontally, consider darkening the triangle of sky to the top right with a soft feather along the edge of the light cloud (see the bottom image).

By darkening what is already in the image, what is already along the edges of the frame, you can create a more natural vignette that is invisible to the casual observer.

Cover up the top photograph, look away from the page and then look at the bottom photograph again. The darkening of the top right corner is completely believable because it is based on what is already there.

I find this a good technique for vignetting.



Notice the diagonal line in the clouds (above). If you wanted to darken the sky, it would be harder to see your technique if you darkened along the same line (below).

MANY SMALL ADJUSTMENTS, NOT A BIG ONE

We don't want to spend too much time sitting in front of a computer, processing our files. On the other hand, we do want to produce work that is refined and invisibly edited.

It can be tempting to give an image just one or two quick adjustments and think that will do. True, sometimes you only need a few adjustments, but for more complicated scenes and subjects, 10, 20 or 30 adjustment layers (or brushes) may be required. More adjustments layers isn't automatically better, but it can be.

In the example opposite, thousands of penguins congregate as adults (black and white) and adolescents (orange and brown), and like most family picnics, the kids hang out together, creating the wonderful colour patterns you can see.

By making a global adjustment (to the entire image), I was able to emphasise the contrast and pattern, but not necessarily distinguish between the two types of penguins, and the lay of the land beneath them remained relatively flat.

By using selective adjustments, I was able to separately lighten and add colour to the adolescents, so they stood out more

prominently against their less colourful, darker parents. I could also introduce some light modelling by making some areas a little darker than others, giving more shape to the undulating land on which the penguins were standing.

There's another reason for using lots of small adjustments instead of one or two large ones: better control over the masks and the transitions.

If you make one strong adjustment with a single mask, it is harder to hide the transition area, even with a big, soft brush.

In comparison, two, three or four gentler adjustments which build up to achieve the same total effect, each with slightly different shape masks and mask positions, can help to hide where your handiwork has been.

Of course, if your masks are a little clumsy or not feathered enough, there's a chance your editing will look worse, not better.

However, let's look at this positively! Take lots of small steps, ensuring each step is invisible before you proceed to the next one, and the final result should look stellar!



Just two adjustments were applied to this image, adding a little contrast and adjusting the exposure.



In this version, another three adjustments were made to lighten the young brown penguins and darken the mature adults. The result is subtly different, but I find it's these minor adjustments that make big differences to the quality of the final edit.

DON'T LIGHTEN, DARKEN EVERYTHING ELSE

When it comes to tonal direction, we're told that light areas attract attention while dark areas can be overlooked. For this reason, it's suggested to have our subject lighter than its surroundings.

While rules like these are often broken, the basic premise is very helpful when it comes to lightening and darkening our images. It makes sense for our subject to be lighter than its surroundings (or perhaps darker if the surroundings are very light). We're looking for a contrast between the subject and its background.

However, don't automatically try to lighten your subject. Your global adjustments may have already set your subject to

its optimum brightness, so to lighten it further would ruin its reproduction. It would no longer have invisible technique or you may lose all the detail due to overexposure.

Instead, think about darkening everything else.

Remember, having your subject lighter than its surroundings is all that's required. We don't have to make the subject itself lighter to do this, we can make everything else darker.

The same principle applies to colour saturation and contrast. Rather than increasing the saturation or contrast on your subject, consider reducing the saturation or contrast on everything else.



The original image is above.

In the middle image, the little iceberg (a growler) has been lightened, but the result is overexposure of the ice and the detail and texture is lost.

In comparison, by leaving the iceberg alone and darkening the background, a better result has been achieved (bottom). The iceberg still stands out because it is lighter than its surroundings, but it has also retained the wonderful detail and texture of the ice.

PROCESSING THE PORTFOLIO IMAGES

It goes without saying that your portfolio must be your best work. How do you ensure this?

Auto Adjustment

After you think you have an image file finished, and assuming you're using Photoshop, add a curves adjustment layer on top and press Alt/Option + Auto. (Optionally, if you don't want to use a layer, just open the curves tool and press Options.)

Photoshop will open up another panel with four options, or seven if you include the 'Snap Neutral Midtones' check box.

What Photoshop is doing is redistributing the tones and colours 'evenly' between black and white. There are a number of different formulas you can use to get an 'even' distribution, so Photoshop helpfully offers you four.

Assuming you have a good quality monitor and that it has been correctly calibrated and profiled (so what you are seeing on screen is a good representation of what your file actually looks like), click on each of the buttons in turn and see if the result is improved.

I often find this process at the end of my editing can 'clean up' my colours and tones, but of course if you don't like any of the

results, or it doesn't make much difference, you can just discard the change.

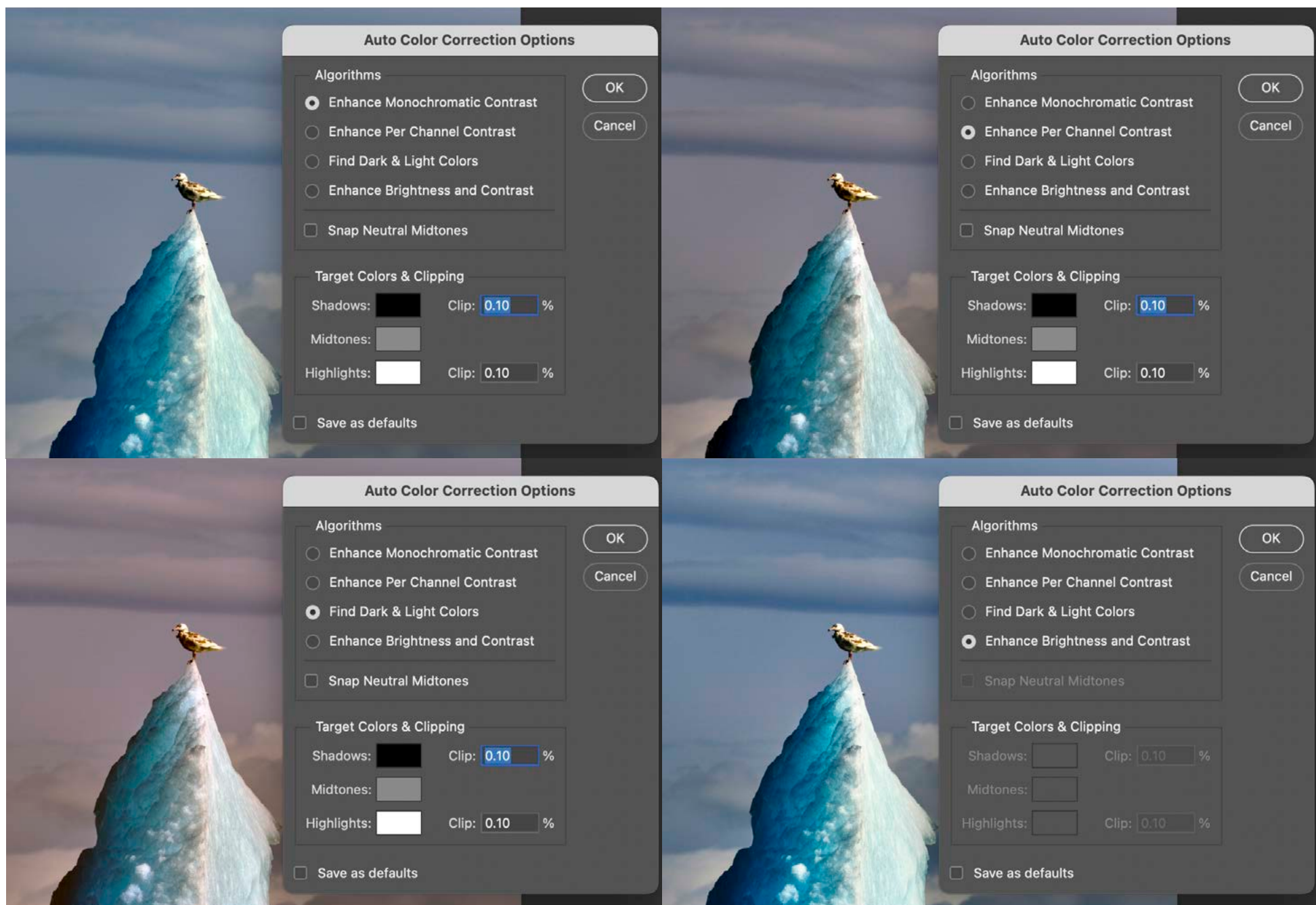
Spots and Dust

Perhaps the photographer's greatest fear is printing a portfolio and leaving dust spots in the image. It's amazing how easy it is to miss them – and how often your viewers will point them out!

The only way to effectively spot your files is methodically. Enlarge your image on screen to 100% (or 200% if you wish to be pedantic). Start in the top left corner and view the image. Remove any spots or dust marks with the healing tool, or sometimes the cloning tool. Don't have too much 'feather' on the tool, then again, don't have the edge too hard either. Start at 50% feather and check the the resulting fixes are invisible.

When this section is clear of spots, move one screen width to the right and repeat. Continue until the far right of the screen, then drop down a screen height and go back the other way. Repeat until the entire image has been carefully spotted!

Sometimes there are small highlights or shadows that aren't spots, but look like them. Remove them as well, just in case!



Using the 'Auto' function with a curves adjustment. When you look closely at these four screen grabs, you can see subtle but important differences in the colour, contrast and tonality. You can also see that in each case a different 'auto' setting has been selected. The one you pick is the one you like the best – assuming you have a good quality monitor which is correctly profiled and calibrated.

WHAT ARE YOU GOING TO SHOW?

When you go to one of the poles, there are multiple approaches for creating a body of photographs. One question to think about is, what are you going to show your friends and family when you get home?

I see a lot of people creating photo books with literally hundreds of photographs crammed within the pages. This is a fantastic keepsake and something you will enjoy reviewing for many years to come, but is it something everyone will want to see? Will they spend the time looking through its pages?

When I return from Antarctica and see the family, I reckon I have approximately three minutes in which I can share a few photos or videos – and after that, it's back to family life as normal. I've learnt that the 100 photos I have painstakingly edited while on the ship are not going to be reviewed by my family with the same gusto! Rather, I need to tightly edit a compact selection that shares the experience quickly.

Once you have your initial short edit ready for the family, what are you going to do with all the rest of your photos? There are two, maybe three approaches I take.

The first is the 'art photography' approach. This is where you run through your files and choose your best 20 to 100 images which can be turned into a book or an audio visual. All the photographs are suitable for a competition or an exhibition and they are carefully framed and processed. However, to produce this body

of work may take several months after returning home, so only a dozen or so might be ready for the initial sharing when I get back – and that's just fine because I only have three minutes!

The second approach is storytelling. Instead of worrying about artistic perfection, photographs are chosen to share the experience. What's it like standing in your cabin and watching icebergs float by? How cool is it motoring flat out towards shore on a zodiac? How magnificent are the thousands of penguins standing on the beach (even if you can't share their pungent odours)! The book will have photos of life aboard the ship, perhaps the BBQ on the deck and some idiots doing the polar plunge! It's a documentary, not an artist statement.

Both these approaches can be turned into books or audio visuals for sharing.

A third approach is video. There are many situations in the polar regions that are better recorded and shared with moving pictures. And there's nothing to stop you from combining stills with video in a short movie. Add a sound track or even a voice-over if you're confident.

And finally, no matter how much gear you have or how keen you are to get great photos, at least once a day, put your camera down and just spend a few minutes in quiet contemplation. Acknowledge where you are.



You can be almost 100% sure you'll get a day or two with low clouds and sunny breaks. If you're lucky, you might also find an iceberg which can be placed as a centre of interest. Be patient – as the ship moves, the relationship between the clouds and the iceberg can change and possibly improve.

CREATING YOUR OWN PORTFOLIO

'Proper' photographers have portfolios. What does this mean? Am I suggesting that if you don't have a portfolio, you're not a real photographer?

Far from it! I would never be so rude, but if you look around at the 'famous' photographers, however you define them, you know of them because of the portfolios of their work.

There are a few who are known for only one image, but most photographers produced bodies of work to establish their claim to fame.

In our society, a portfolio establishes you as a photographer, rather than a casual snapshotter who uses a camera. Some photographers only present their work on websites or social media platforms like Instagram – and this is perfectly valid. It is a part of the portfolio process.

However, despite the importance of the internet and websites in our lives, photographers who produce a physical portfolio of their work – a book, an album, an exhibition – are considered to be making a statement with more credibility, something that

posting on the internet does not achieve.

It's almost as though photographers are trying to distinguish themselves from the millions of snapshotters who post onto Facebook and Instagram in search of 'likes' and hearts. So, what makes you a photographer if it isn't the equipment you use? I think it's what you do with your photographs that matters – and one way to establish yourself as a 'proper photographer' is to produce a portfolio.

Of course, there's no guarantee people will like your portfolio or even look at it. However, that's not the point. The process of putting together a portfolio will force you to consider your work both carefully and seriously and in so doing will advance you in many other ways as a photographer.

Don't take my word for it – try it! On the following pages, I've outlined all the important steps and stages of a portfolio project. It's easy, it's not overly time-consuming and importantly, it's a lot of fun!



No matter where you are in the polar regions, there's always something happening, As our zodiac grounded on the shore for a landing, I stayed put to shoot this Adelle penguin deciding whether to return to the water. I used a 200-400mm with a 1.4x converter to limit the angle and throw the background out of focus.

A PORTFOLIO OF... WHAT?

A portfolio is a collection of photographs designed for presentation to an audience.

Books can be read by millions, exhibitions seen by thousands, but a portfolio is usually produced as a personal statement and expected to be viewed by just one or two people at a time, often in the company of the photographer as well.

Of course, there are no hard and fast rules about portfolios. Advertising photographers used to drop off their lavishly produced portfolio to an advertising agency, hoping that one of the art directors would have time to review it and then hire them for a job. These days, most photographers rely on art directors finding their work on their website, so the website becomes a defacto portfolio – or as is more often the case, a number of different portfolios.

For most polar explorers, creating a portfolio is a personal exercise that will be viewed predominantly by family, friends and, possibly, other photographers.

Finding A Theme

A portfolio needs a theme. The theme can be your best photographs taken on your voyage to the Arctic or Antarctica. There's nothing wrong with this and, even if you choose to do some other portfolios as well, this is probably the portfolio that will matter the most.

Of course, another important 'portfolio' could be a travel diary presented as photographs. You could start with a photo taken

every morning outside your cabin window, followed by five or six key points in the day – a lecture at sea, a zodiac cruise or an adventure on dry land. However, these photos would be selected because they tell a story. They aren't necessarily art pieces in their own right.

Can you see a difference? Both portfolios are collections of photographs, but the underlying purpose is quite different.

A portfolio of polar photographs could be designed to showcase your skills as a photographer first and present the story of your voyage second. A travel diary is designed to tell the story first and it's not so important that every photograph is perfectly framed and timed. In fact, there's an authenticity if the photographs in a travel diary aren't aesthetically perfect (but we would certainly expect them to be technically adequate).

Portfolios can cover anything from a specific location (e.g. one of the glacier fronts or a small island), a series of your best sky scapes, a compendium of wildlife or a series of abstracts using Intentional Camera Movement (ICM) to give your viewers a feeling of the location, rather than presenting a clinical record.

However, it's important to consider that part of a portfolio's success is found in the synergy produced by the photographs being presented together. The photographs should work collectively to present an idea or a concept. They can also create a story, although some purists might suggest your portfolio is becoming more of a book than a portfolio.

But it doesn't matter!



At home, everyone will want to know what the ship looks like, so make sure you take a selection of photos to choose from. This is from the bow with a very wide-angle lens. If you sweet-talk your zodiac driver, he or she will take you there for a quick look on one of the outings.

HOW WILL YOU PRESENT YOUR PORTFOLIO?

Should you choose the photographs for your portfolio first, or work out how you are going to present them?

Sometimes, having an idea of what you want the portfolio to look like will affect the choices you make for the individual photographs, but equally so, knowing what photographs you want in your portfolio can affect how you decide to present them. In practice, there's a bit of toing and froing.

So, what are your options?

Website/Social Media

Perhaps the easiest way to create a portfolio of images is using a social media app like Instagram. I'd not suggest Facebook as while it certainly has a good reach, it's such a messy interface to navigate, whereas with Instagram you can post your images consecutively to produce a portfolio. Instagram also lets you post multiple images at the same time, producing a mini slide show – and this can be great for a mini portfolio.

Given how easy it is to open an Instagram account or even set up your own website (e.g. with Zenfolio), there really isn't any excuse for not presenting your work online.

Boxed Prints

What about a set of physical prints? One option is to buy a small print box to hold a collection of individual prints. Each print can be matted and mounted, giving it substance when held in the hand. Or the prints can be unmounted, but if the paper or media is too thin or limp, it might not have the impact you hope for. While photography is a visual art, when you create a portfolio, the physical presentation is extremely important. It's like buying

jewellery or chocolate – there's a reason the packaging is so good!

Don't forget to add in a pair of white gloves for your viewers to use while handling the prints – that adds to the message!

Album

A second option is an album. Unlike a photo book with thin pages, an album generally has thicker pages and real photographs printed and mounted in position – so it's a matter of producing the prints first and then mounting them on pages to create an album.

This ensures you retain maximum photographic quality (you produce the prints), with the convenience of a book format that is easy to handle. Of course, you can also look at bespoke on-demand printers like Momento Pro in Australia who will print your work onto thick, almost board-like pages so the presentation is very much like an album, but with the convenience of a photo book. Think of it as a photo book with thick pages.

Photo Book

A photo book is certainly a great way to present your portfolio and some book printers (such as Momento) can also print your photographs using a high end photo printer (like an Epson) on high quality rag paper (such as Canson Infinity), so the photos in the book are of maximum quality.

If a photo book only has 12 or 20 pages, it can seem a little thin – and unimpressive. Would you be better off with thicker pages to pad out your portfolio in an album or use boxed prints?

On the other hand, for larger portfolios with lots of photographs, a photo book is an excellent suggestion.



Rather than an online portfolio, think of creating an album (the RAW album by GraphiStudio at bottom), a portfolio box of prints (from The Edge Photo Imaging at top), or a photo book (as produced by Momento Pro in the middle).

HOW MANY PHOTOGRAPHS IS BEST?

We have all observed how busy people are these days. There's always time to grab a coffee on the run, but not necessarily to sit down in the cafe and enjoy it.

The same can be said about anything we see or view, whether it is a book, a social media post or a television show. If what you are presenting takes too long, your viewers won't get to the end of it.

So, what is too long? For an avid bird lover, a portfolio of 200 penguin photographs might not be enough, while 10 penguin portraits might be too many for an accountant more interested in superannuation. There isn't a magic formula, but chances are the optimum number of prints for your portfolio is fewer than you'd like to include!

It's always tempting to add in a few extra prints because you never really know what people might like the most – and perhaps some people might like your extras? However, while the portfolio is being designed with a viewer in mind, the real person you have to impress is yourself.

Yes, But How Many?

The number of photographs in a perfect album is 12.

Or sometimes 8.

Or maybe 24.

The number of photographs in an album ranges from just six to as many as 60 or even 100. However, the idea behind a portfolio is to present yourself within a theme. It's a bit like giving a speech. If you can do it in five minutes, you'll have more impact than boring people for an hour.

As a guide, I would aim for 10 to 12 photos in your first portfolio. To get to this 10 to 12, you may prepare a short list of 20 or 30 photographs.

However, before a photograph makes it into your portfolio, it needs to be a photograph that you believe you will be proud of in another 12 months time.

We all improve and progress as photographers, but I have photographs taken many years ago that I am still proud of. These are the photographs that should make their way into your portfolio.

Remember, you can always make a second portfolio and knowing this can sometimes make it easier to leave a few photos behind, but at the end of the day, the number of photographs in your portfolio is going to be the number that has the maximum impact on your viewers – and on you!



Icebergs really do come in all shapes and sizes. On your first voyage, photograph them all and enjoy the process. However, towards the end of your voyage, having seen lots of icebergs, you can become a little more selective and pick those with a feature or shape that really stands out from the ordinary.

TITLES, INTRODUCTIONS AND CREDITS

If you're going to make the effort to create a portfolio, it's worth spending a little extra time in preparation and generating appropriate titles, credits and even a written introduction.

Title

You don't have to be super creative with the title and, in fact, the word 'Portfolio' might be all you need. And rather than having a long descriptive title, perhaps a subtitle would be better e.g. 'Portfolio - Photographs from 2025'

Another option is to have your name as the title, e.g. 'Peter Eastway', or maybe your name and the date as a subtitle e.g. 'Peter Eastway - Photographs from 2025'.

Just as important as the title itself is the typeface and font you choose. Small titles can look very cool, but so can large type taking up the entire page. And we haven't even discussed if we should put a photograph on the front cover or leave it as a solid colour or pattern!

Credits

The main credit required is for you as the photographer. If your name is included in the title, mission accomplished. Generally

you'll want your name somewhere on the front cover or box lid so people immediately associate what's inside with you.

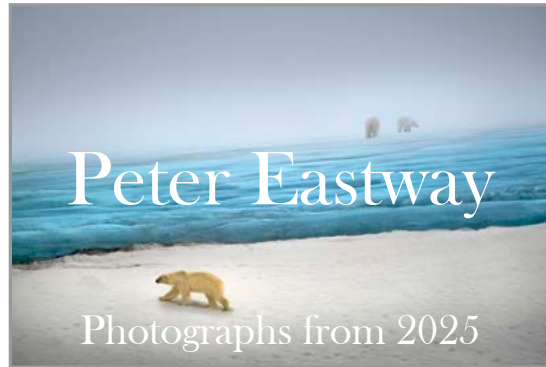
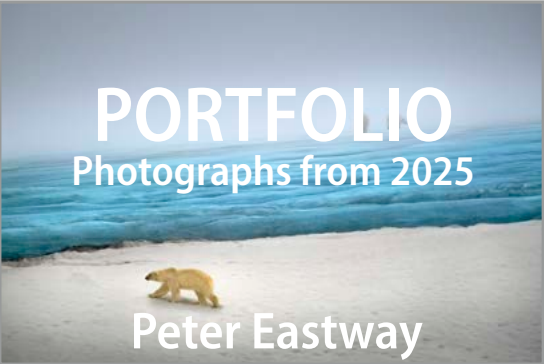
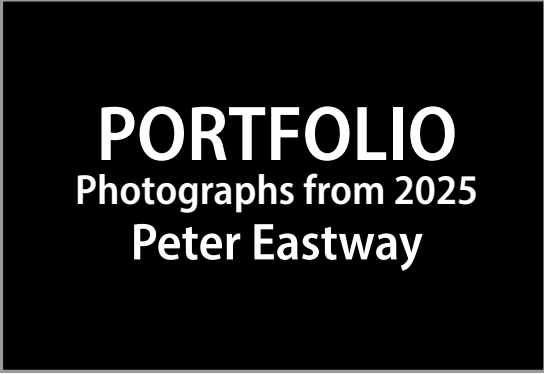
In addition to your name, who else would you like to acknowledge? You can do an Oscar acceptance speech and devote the portfolio to your family, but keep your end audience in mind.

There may be people who have helped you produce the portfolio, perhaps helped with travel arrangements, post-production or the design. Perhaps you want to include your equipment or the software used? Consider a page at the end of the portfolio acknowledging these people.

Introductions

Most portfolios don't have introductions *per se*, but to put your photographs in context, it may be appropriate to write a few words that explain the photographs. You're probably best off keeping the words factual and letting the photographs speak for themselves.

As you can see on the next page, the titles and credits will become a part of the design and as my patient wife correctly tells me, the best approach is to work with a good designer.



The cover of your portfolio sets the tone for the rest of the presentation, so give it plenty of thought and ensure the titles and words are appropriate for what you want the portfolio to achieve.

CAPTIONS, HEADINGS AND FOLIOS

Imagine your viewer is looking at your photographs. Can the photographs speak for themselves, or should you provide some basic information to put them into context?

Good Caption, Bad Caption

There are several schools of thought about captions and photography.

Some people believe that if a photograph is worth one thousand words, then surely there's no need for a caption.

On the other hand, a photograph of a penguin might look very cute to many viewers, but a caption describing the environmental challenges facing the penguin would probably change that.

Information and context are very powerful tools when used correctly. They can explain things about a photograph that can transform how it is viewed. It might be quite appropriate to caption the people in your photographs, if only for historical purposes in the future. It might be appropriate to provide the location of a mountain or a animal.

On the other hand, descriptive captions like 'My Little Angel' or 'Sunrise's Golden Breath' are perhaps less helpful – but this is a personal choice. The only person you have to make happy with this portfolio is yourself.

So, photo headings or captions are optional and, rather than

captioning each photograph, an introductory paragraph may be all that's required to describe what the portfolio is about.

Headings

If a portfolio contains different sections or chapters, it may be appropriate to divide the portfolio into sections using headings. For instance, a portfolio of polar wildlife may be divided into whales, seals, penguins and birdlife, with a heading for each group of photographs. The heading might appear on each page as a 'running head'. However, headings are probably unnecessary for smaller portfolios.

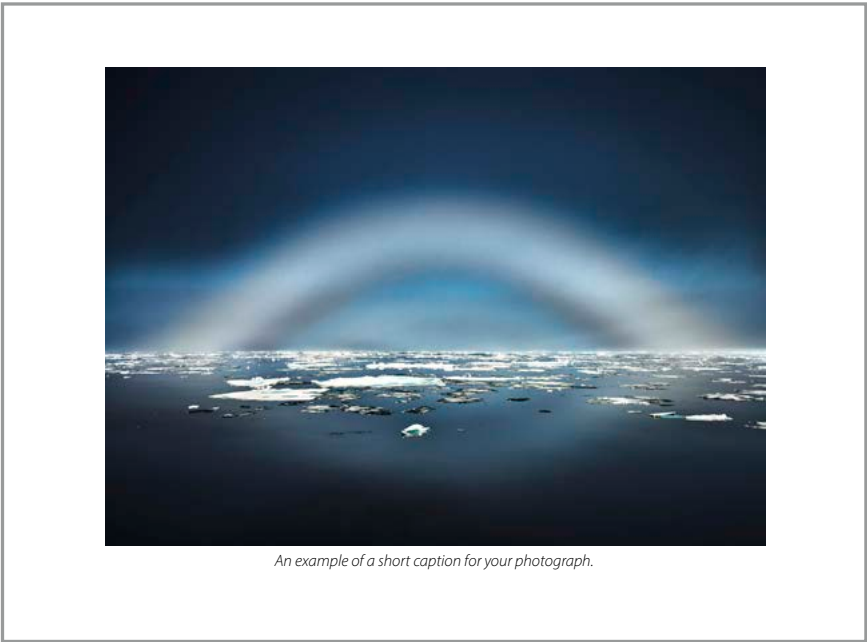
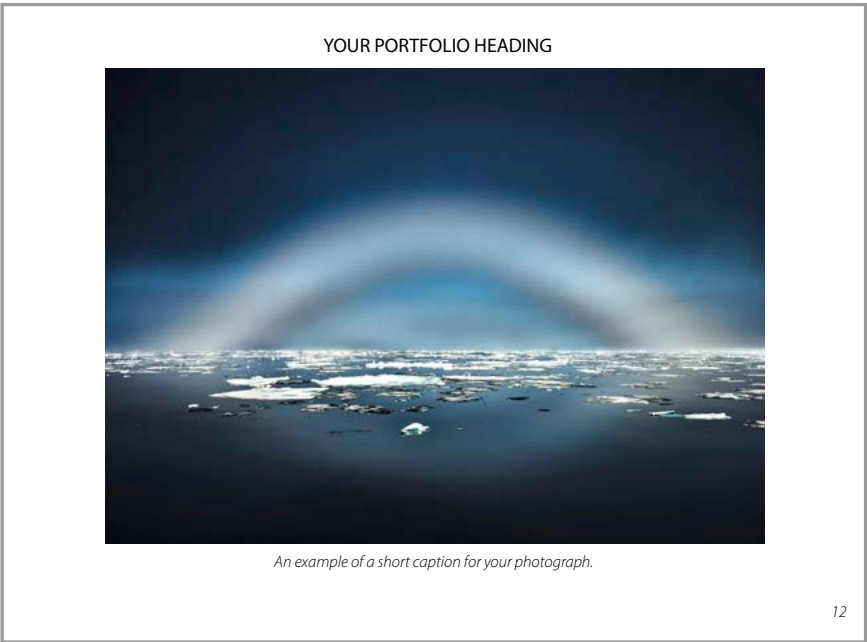
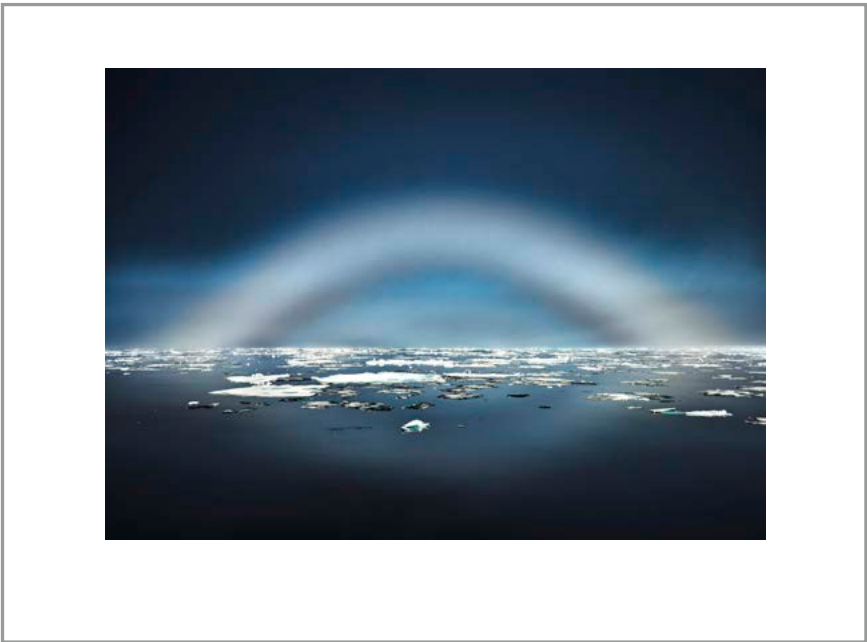
Folios

And what about page numbers? If you only have a dozen or so images, page numbers are not essential, but they could be used as a design device.

Even your matted prints in a box could be numbered in a smart design.

For larger portfolios, especially those in photo books, page numbers can be very useful if your viewers wish to refer to a particular photograph.

But there are no rules!



Do you keep your pages pure with no text, do you add a caption, or perhaps a heading, page number and a caption? And what happens if your photo fills the page - do you put text on top of the photo?

SIZING, BORDERS, BACKGROUNDS...

Few readers will have problems with sizing their photographs for their portfolio – meaning our cameras have more than sufficient pixels to produce a high quality reproduction. However, you may need to resize your images depending on how you are going to have your portfolio printed or prepared.

Here are some suggestions and thoughts on how the images could be presented.

Sizing

Make a set of files especially for printing the portfolio. Output them as JPEGs in AdobeRGB colour space at 360 dpi (if you have enough pixels), with the dimensions set roughly to the size of your portfolio page.

In practice, I find that the dimensions don't need to be precise as the printing software will re-size the pixels to precisely the physical size you specify.

When you output your file, you can consider applying a little extra sharpening – Lightroom is pretty good for this. Try medium sharpening for glossy or matte paper, depending on what type of surface you are printing to.

A glossy paper can have a lot of impact and is great for subjects that are strong and dynamic – such as nature and travel. On the other hand, a matte paper might be better suited to a fine art

approach at the Poles! But there are no rules!

Borders

Whether you're putting your photos in a matte (window cut) for mounting, or on a page in an album, there are a range of border options: no border, generous white border, narrow black border, irregular borders and so on.

One suggestion is to keep the border design consistent throughout the portfolio as this tends to tie the photographs together. Another suggestion is to steer away from brightly coloured or overly ornate borders, the idea being we want viewers to look at the photos, not the frames. But there are no rules!

Backgrounds

So, when you place your photos in a mount or on a page, what colour should the mount or page be? White is the standard and in 90% of cases, is probably your best choice.

Some photographers like black, but often black paper can appear dark grey, or if glossy can hold unsightly fingerprints.

On very rare occasions, a colour background, a ghosted image or a pattern can work, but keep in mind that the heroes in your portfolio are the photographs, not the presentation.

But rules are meant to be broken!



You might think you need a colour matte or background, but do you really? White is generally best, maybe black, rarely a colour. The same can be said for keylines and borders - but rules are meant to be broken!

MULTI-PURPOSING YOUR WORK

So, at this stage you have a collection of amazing polar photographs, ready for presentation in a portfolio of some description. Should this be all you do with your portfolio?

Different Designs

With your first portfolio designed as, say a box set, why not reuse the photographs in an album format as well?

You could design a box of large prints, say A3 or A2 in size, mounted and matted, and have a smaller A4 album as well. Then add in a photo book just in case you want to give away or sell copies of your work.

Website

These days, getting your work seen is important and although we've agreed that a physical portfolio is very important for a 'real photographer', this doesn't mean you shouldn't use the same images on your website.

If possible, consider presenting the photographs in the same order and with similar design attributes as your portfolio, so the two compliment each other.

The same set of images could form part of a Facebook album or

sit on your Instagram account, further extending the exposure for your work.

Audio Visual

Putting your photographs to music in an audio visual presentation is another great way to share your work. And if our viewers get bored, at least they can shut their eyes and enjoy the music (that is a joke because obviously they will be riveted by our visual literacy).

Audio visuals can also be presented on your website or posted to Youtube or Vimeo. Just make sure that you have permission to use the music that you choose.

Exhibition

One of the most challenging things a photographer can do is to have a public exhibition. Suddenly your work is up on the wall and real people are walking through the gallery, inspecting your work.

However, the good news is that much of the work required to produce a body of images for exhibition will have already been done. Now it's just a matter of booking the venue and having the prints framed for fame and riches.

Well, fame at least.



1207 photos

© Peter Eastway

Once you have created a portfolio, see where else you can display and show it. You might as well!

PORTFOLIO PIECES

From the Tales by Light project (which can still be seen on Netflix), one of my favourite images is of this penguin at Gold Harbour on South Georgia. You can't orchestrate these moments. The photo was framed with penguin standing apart from the waddle (a group of penguins), but when the penguin bowed his (or her) head, as though taking applause for the opportunity, it was beyond my expectations! Poise, pose and expression are so important in wildlife photography that I will often shoot dozens of frames just to get the right one. Don't fool yourself into thinking you can nail the best shot with a single shot – or that there is some dishonour in taking lots of photos to get a single good one. All that matters is the end result.



You can't plan these moments either. After three days of horrible weather, we ended up in the Weddell Sea and at sunset, the skies cleared and a full moon rose just next to the small island. However, while your voyage might not coincide with a full moon, there will be moments of beauty like this for sure. I haven't been on a polar voyage where there haven't been at least two or three remarkable weather moments – and usually there are many more.



This polar bear was powering along at a good 6 to 10 kilometres an hour. He was fully aware of our zodiac 100 metres or so off the shore, but uninterested. I imagine all he had on his mind was finding some food as the sea ice had left for the summer and there are generally thin pickings left back on shore.



While Svalbard and the Arctic is considered by many as a remote and inhospitable area of untouched wilderness, recent human history can be seen all around, from shipwrecks and whaling ruins to small, generally empty hunting huts, dotted along the coastline. Skansbukta, Svalbard.



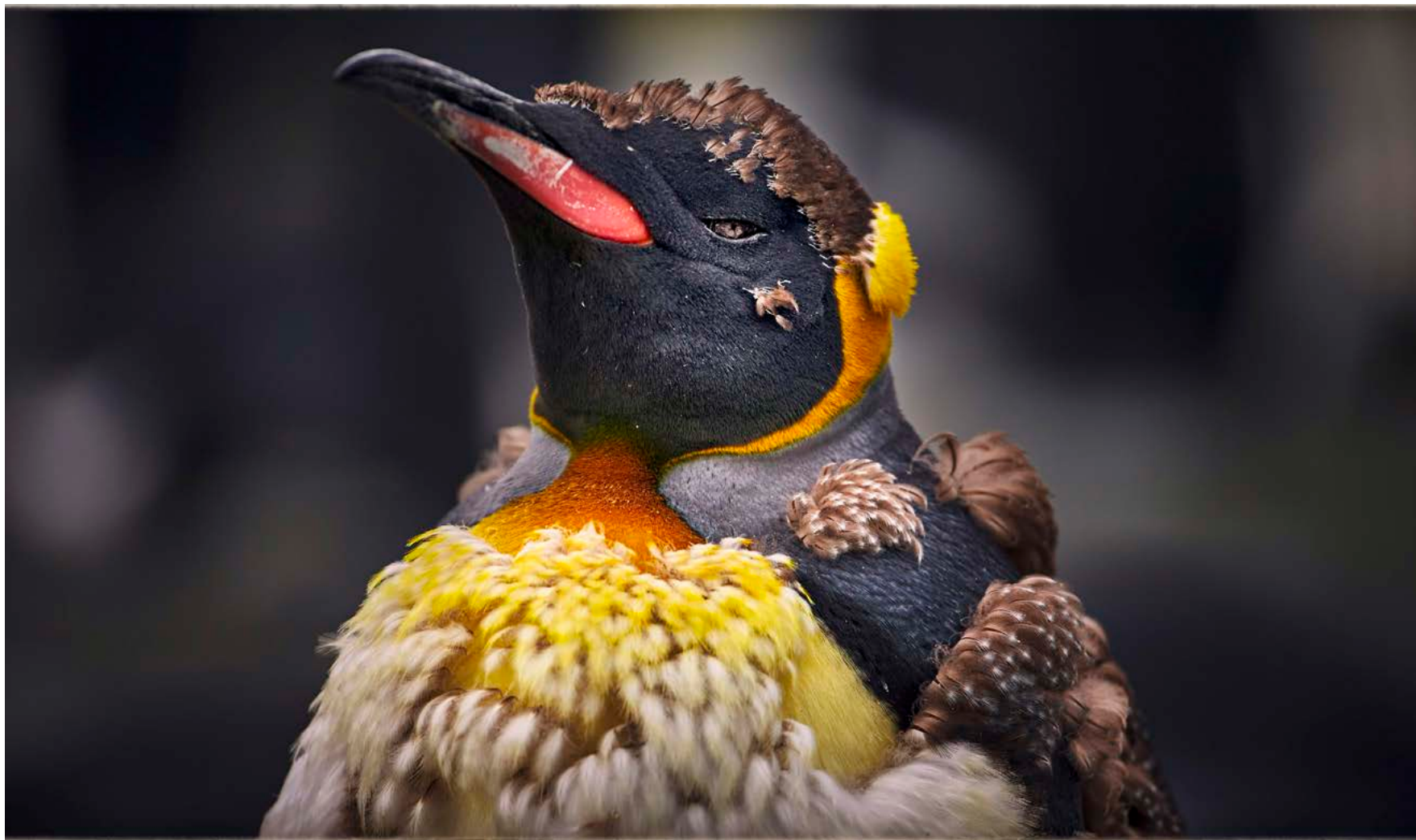
Ideas and inspiration come from all different sources. My readings of old Antarctica literature often included engravings to describe what the author struggled to communicate in words. In some of these etchings, I noticed how great the landscape looked where a little island, covered in snow, reached the waterline. This was a thought I still have to this day and if I can find an islet that meets the criteria, it's always worth a few more frames, especially if it is shrouded in weather. Foyen Harbour, Antarctica.



This is a composite image in that the sky has been added. The weather surrounding the iceberg was low cloud with limited visibility, but it was thin enough for the sun to push through and provide some wonderfully soft, top lighting. However, there was nothing in the sky from the original file to play with, so a sky from my archives was introduced.



Penguins are often seen moulting (depending on the season), sometimes from a juvenile to an adult, or as seen here an adult simply refreshing the livery. I find that the longest telephoto you have is great to capture these penguin portraits. If you can't kneel down on the ground (because of environmental restrictions), you can often find locations that are a little higher than you as you wander around the landing – and these are ideal for an eye-level portrait if populated by a penguin!



There aren't a lot of opportunities to shoot with a tripod on shore, but when they happen, I find a simple composition with something interesting in the foreground works really well. It's not a formula, rather the beginning of an exploration. I took a dozen or more photos of this grounded iceberg with moderately long shutter speeds to allow the brash ice behind to blur. Deception Island.



As a landscape photographer, I love the ruins decaying in the middle of a frozen wilderness. Sometimes they are buildings, sometimes ships, sometimes tanks from the whaling industry. And while the rust colours in these tanks were not nearly as vibrant to the eye, I love the way the colour dominates the composition. And similarly, in a portfolio of whites and blues, images with a little red will stand out as well.



Cold weather can mean lots of great atmospherics. Low cloud or high fog swept the coast at Faksevangen, Svalbard. while Siberian driftwood and a long exposure created the foreground interest.



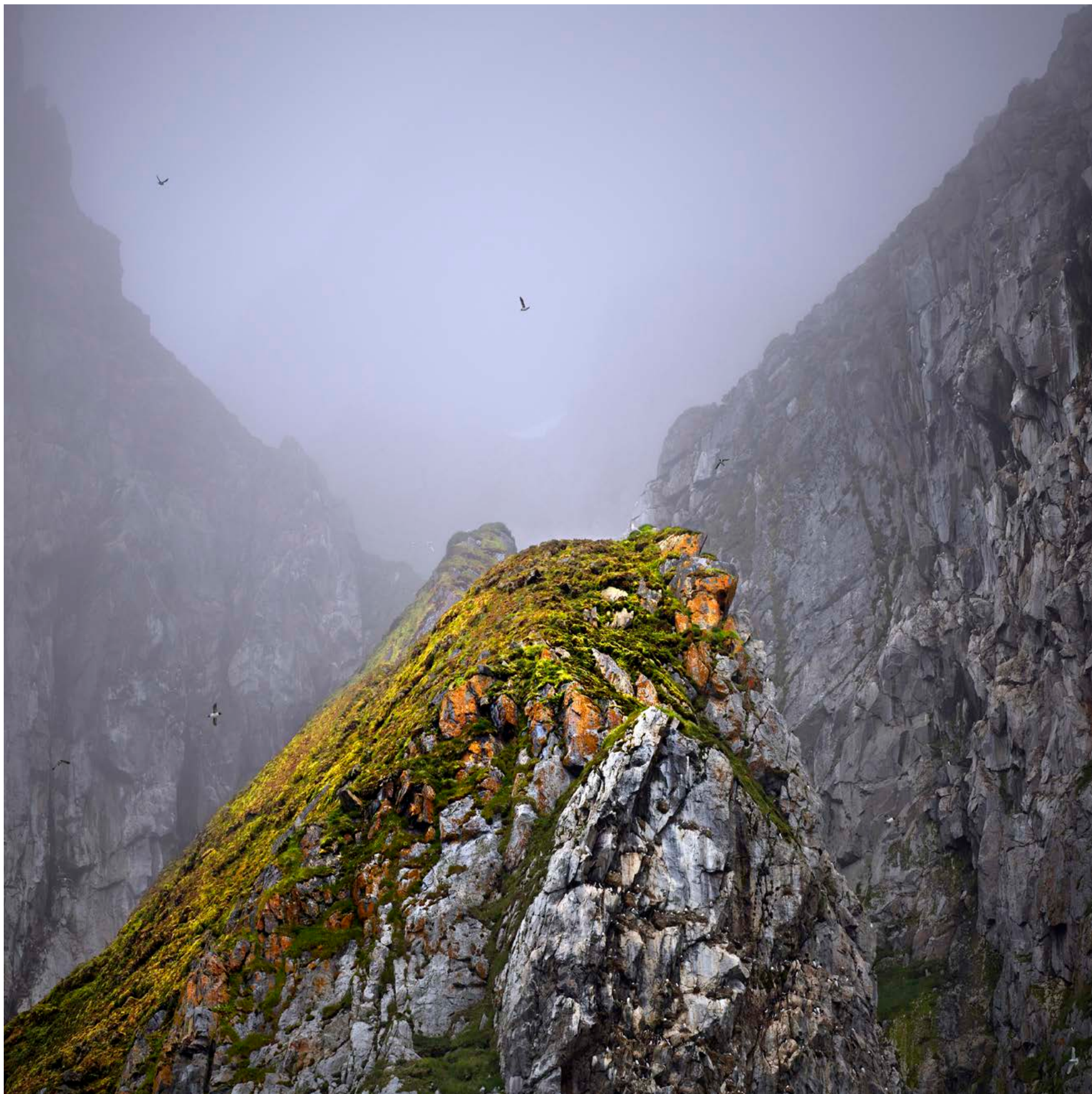
Not every voyage to South Georgia visits Drygalski Fjord, but if you get there, you'll never forget the dozen or more glaciers descending directly into the fjord. This is a hand-held stitch of seven or so images from the back of the ship. Think about this: as soon as you put a wide-angle lens on, everything in the scene is reduced in scale (in order to fit it all in). The original photos had the viewer looking 'across' to the top of the peaks, whereas in reality I was looking at 45 degrees or more up to the peaks. To better communicate the height of the mountains, the image has been slightly 'squished' together (using a transform tool) to give a truer sense of how high the peaks were.



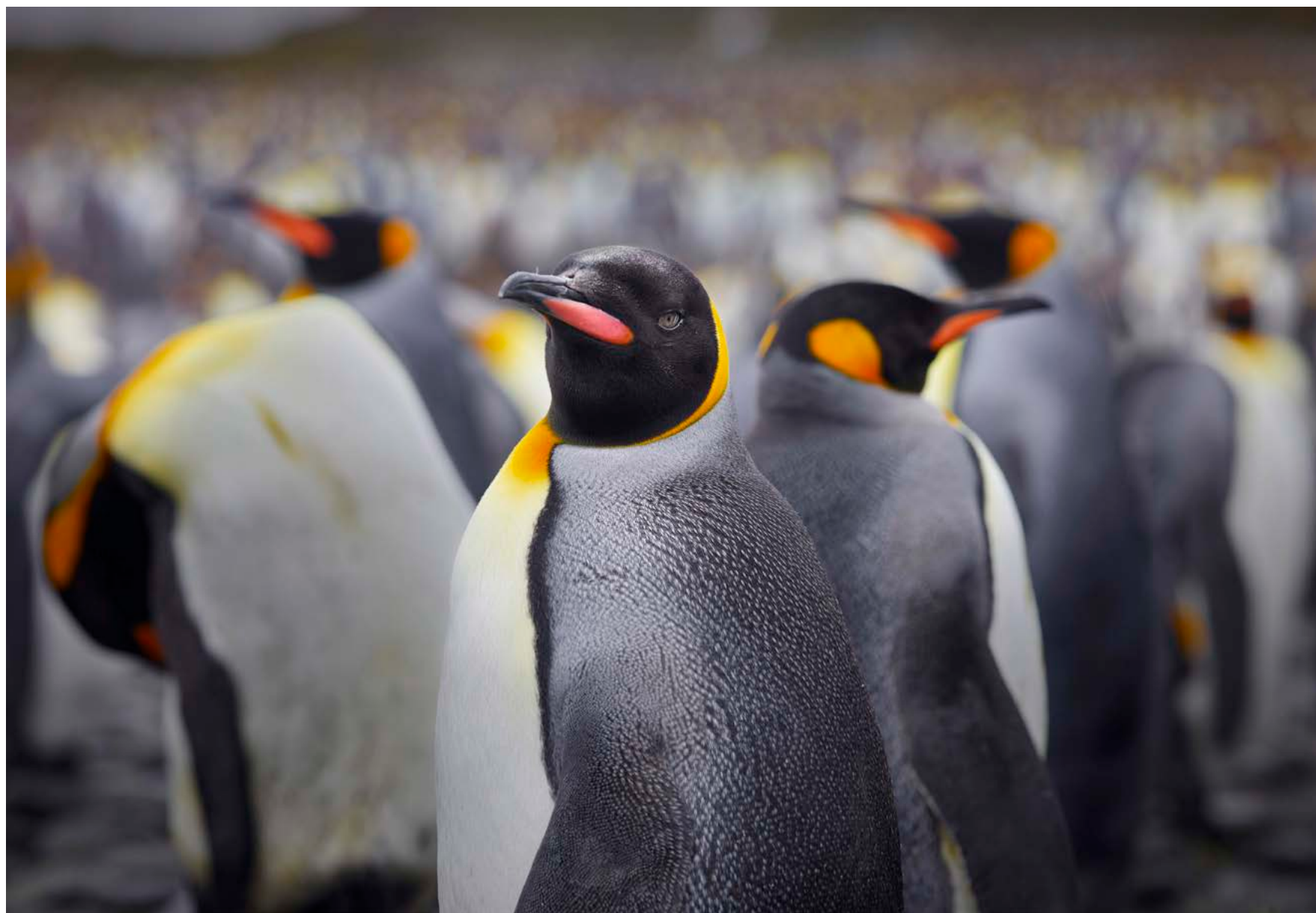
There are strict rules about getting too close to the wildlife. This albatross mother was on Prion Island, sitting right next to the wooden walkway which keeps visitors away from the nests. Using a long telephoto, I was able to take a tight portrait. We wondered why the albatross didn't move. A later group discovered that the mother was sheltering a chick underneath her wings, so she was undoubtedly relieved when we finally left.



Shooting from a zodiac, a telephoto lens allowed me to look up and crop tightly into the mountains surrounding Hamiltonbukta, Svalbard. The airborne birds give the landscape its scale.



On this voyage, I had a prototype 100-megapixel Phase One back to use and this photograph was used by Phase One to demonstrate just how much resolution it could afford – the penguin's eyes were enlarged to reveal all the wonderful detail in its iris. I used a 240mm lens (like a 150mm telephoto on a full-frame sensor) with the aperture wide-open (at f4.5), which threw the background out of focus.



Every now and then, you will get an opportunity to stand still for a little while. We were visiting the Argentine Islands in Antarctica late in the season and a lot of the surface snow had melted away, leaving behind the compacted ice and snow with its myriad colours. A long exposure blurred the water, simplifying the composition and pushing the viewers' attention to the ice facade.



I think what inspires me most about the polar regions is how the weather can transform an otherwise standard vista into something quite remarkable. The trick is to be always keeping an eye out on the weather. (Mind you, I can also relate a few instances when I didn't follow my own advice and paid the penalty!) Foyn Harbour, Antarctica.



Everyday you will be tempted by grand vistas and you should photograph them all, but once you have them safely recorded on your memory card, pull out your telephoto lens and explore the nuances of shapes, patterns, textures and colours. When you're putting together a photo book or portfolio, these images can be just as important as the grand vistas when it comes to telling a complete story.



Neko Harbour, Antarctica and the advantages of a radio. I was out on a zodiac and could see my friend Ian Goodwin walking up a hill in the distance. Ian is a guide and was scouting tracks, so I asked him to walk a little further down so he was in the sun.



Palanderbukta, Svalbard. A long exposure was used to blur the clouds as they swirled around the mountain. The glacier in the foreground didn't seem to move at all! Don't be disappointed with overcast conditions because they can produce some sublime results.



PETER EASTWAY - BIOGRAPHY

1958 Born Melbourne, Victoria
1960 Moved to Sydney, NSW
1974 First place, Northern Sydney Schools Photography Competition
1976 Joined Mosman Camera Club and met Elizabeth Lough
First place, Snap Your Cat, Whiskas pet food
photography competition
1977 Santa Claus photographer, Neutral Bay
1978 Bachelor of Economics, Sydney University
1979 First place, Goethe Institute Photographic Competition
for Young Australians

Career Highlights

1978 First photos published in Australian Photography
magazine monthly competition
First surfing photos published in
Australian Surfing World Magazine
1979 Author of article on wide-angle lenses published in
Australian Camera Craft magazine, published by Paul Curtis
1980 Became regular contributor to Australian Camera Craft Magazine
1981 Inclusion in the international Minolta Mirror (annual),
published in Japan
1982 Covered Ski World Cup in Kitzbuhel for Slope Magazine
Appointed editor of Australian Camera Craft Magazine
1983 Opera House surfing story and photographs, Tracks Magazine
1984 Appointed managing editor, Iris Publishing
1985 Joined Australian Institute of Professional Photography (AIPP)
Treasurer, NSW Division of AIPP
1986 Associate of Australian Institute of Professional Photography
AIPP Kodak Achievement Award
National Treasurer, Australian Institute of Professional
Photography, held for 10 years
1988 Ferry to Mosman book and exhibition with Paul Burrows and
Phillip Ramsden for the Australian Bicentennial Celebrations
1992 Published Profitable Photography Newsletter, the name was
changed to The Working Pro and then to the AIPP Journal –
published until 2019
1995 First issue of Better Photography magazine, published with wife
Kathie – still being published in 2024
1995 Master of Photography, AIPP
First issue of Which Camera, published until 2014
1998 Purchased Australian Surfing World magazine with Doug Lees,

Mark Eymes and John (Reggae) Elliss
2001 First issue of Better Digital magazine, co-published with Robin
Nichols, published until 2013
2004 First issue of Better Photoshop Techniques magazine, co-
published with Robin Nichols and Philip Andrews,
then published until 2013.
Surfing World shoot in the Mentawai Islands, Indonesia with
Danny Wills, Dean Morrison, Jay Thompson, Matt Wilkinson,
Mitch Coleburn, Tim Baker and Lance Knight.
2005 Chairman, Australian Professional Photography Awards,
held for six years.
2006 AIPP Grand Master of Photography
Panasonic Japan – camera range catalogue shoot
Chillfactor Magazine – Niseko shoot
2008 Adobe Lightroom – research trip with Adobe programmers in
Tasmania with Mikkel Aaland
Panasonic Japan – second camera range catalogue shoot
2009 First voyage to Antarctica, South Georgia and the Falklands
PNG shoot for Tourism PNG
2012 Apple uses iceberg photograph for Macbook Pro TV commercial
2012 Phase One – produced Capture One 6 instructional video
series in Denmark
2006 Dairy Australia book project with Ken Duncan
2010 The Pilbara Project with Christian Fletcher, Les Walkling, Tony
Hewitt and Michael Fletcher. The genesis of the Ninety Degrees
Five (ND5) collective.
2012 Australian postage stamp – Farming Australia series
2014 Introduced International Landscape Photographer of the Year
Awards with David Evans and Nathan Oxley
2015 Antarctica shoot with Abraham Joffe for Tales By Light television
series, in partnership with Canon, Nat Geo Channel and
(subsequently) Netflix.

Selected Presentations and Tours

1995 Business Planning for Professional Photographers with Kodak
(Australian capitals)
Co-leader of photo tour to Namibia with Ruby Spowart
2000 AIPP – GST workshops for professional photographers
(Australian capitals)
2005 Speaker, Orvieto Fotografica
New Zealand, NZIPP

2006	Speaker and judge, Wedding Portrait Photographers International (WPPI), Las Vegas, USA
2007	Speaker and judge, Wedding Portrait Photographers International (WPPI), Las Vegas, USA Speaker and judge, NZIPP, Auckland, NZ Lecture tour for Phase One to Hong Kong, Korea and Singapore
2008	Speaker and judge, Wedding Portrait Photographers International (WPPI), Las Vegas, USA
2009	Speaker, FotoFest, Birmingham, UK Speaker and judge, NZIPP, Wellington, NZ Hamilton Island Away photography workshop with David Oliver (annually until 2016). Orpheus Island Print workshop with Les Walkling and John de Rooy
2010	Leader, Karijini Photo Workshop with Christian Fletcher and Tony Hewitt (annually until 2016)
2010	Leader, Central Australia PODAS (Phase One Digital Artist Series) photo tour
2011	Workshop and photo tours around the world become a regular part of calendar

Exhibitions

1979	Photography for Living With, Cave Group, Printers Gallery, Crows Nest, Sydney, NSW Goethe Institute Travelling Exhibition, West Germany
1981	Festival of Sydney Photography, A Creative Approach, NSW
1988	Ferry To Mosman - Australian BiCentennial Celebration, Mosman with Paul Burrows and Phillip Ramsden
2003	Away - exhibition and book with David Oliver, Gallery Xposure, Rozelle, NSW
2004	Spirit exhibition, Neutral Bay, NSW with Joanne Felk, Tania Niwa and David Oliver
2011	Rockhopper, Gaffa Gallery, Sydney The Pilbara Project, FORM Gallery, Perth, The Pilbara Project, Courthouse Gallery, Port Hedland
2012	The Pilbara Project: The Photographers' Cut, Midlands, Perth The Pilbara Project, Sofitel Hotel, Melbourne ND5 Travel Expo, Exhibition Halls, Perth The Pilbara Project, Oz Fest, New Delhi, India South West Light, Yallingup Gallery, Yallingup
2013	At The Edge of the Light, Australian High Commission, Wellington, New Zealand

2014	At The Edge of the Light, WPPI Exhibition, Las Vegas, USA At The Edge of the Light, The Digital Show, Melbourne 2016 Shark Bay - Inscription, Lynton & Kay Gallery, Perth 2016 Shark Bay - Inscription, Maud Creative Gallery, Brisbane At The Edge of the Light, Millenium Public Art Gallery, Blenheim, New Zealand
2015	North + East, Maud Creative Gallery, Brisbane Earth Matters, Monash Gallery, Melbourne
2016	2016 Shark Bay - Inscription, Denham, W.A.

Major Awards

1995	NSW AIPP Professional Photographer of the Year
1995	AIPP Australian Landscape Photographer of the Year
1996	NSW AIPP Professional Photographer of the Year
1996	AIPP Australian Landscape Photographer of the Year
1996	AIPP Australian Professional Photographer of the Year
1998	AIPP Australian Landscape Photographer of the Year
1998	AIPP Australian Professional Photographer of the Year
2004	NSW AIPP Professional Photographer of the Year
2004	AIPP Australian Illustrative Photographer of the Year
2005	Grand Award, WPPI, Commercial Category
2007	New Zealand Overseas Photographer of the Year
2008	Grand Award, WPPI, Commercial Category
2009	1st, 2nd, 3rd Landscape Category, WPPI, Commercial Category
2009	Kodak Award of Distinction, WPPI
2010	Finalist, International Section, FEP European Professional Photographer of the Year Awards
2010	1st Place, SWPP and BPPA, Natural World Category, UK
2010	NSW AIPP Landscape Photographer of the Year
2010	NSW AIPP Commercial Photographer of the Year
2010	NSW AIPP Professional Photographer of the Year
2011	Finalist, FEP European Fine Art Photograph of the Year
2013	NSW Landscape Photographer of the Year
2018	AIPP Photography Book of the Year (Middlehurst – Middle Earth)
2019	NSW AIPP Professional Photographer of the Year
2019	AIPP Australian Professional Nature Photographer of the Year
2023	Aerial Award, Natural Landscape Photography Awards

