“Every day is a new exploration into the ever-changing landscape. Shapes, textures, hues and motion appear and disappear in a flash”

SHOOTERS’ GUIDE TO ANTARCTICA

Why the ice is so nice

The penguins are rock stars on such journeys, have no doubt, but it’s the ice that makes it so nice in the southern polar regions. Words and images by **Ewen Bell**.

PENGUIN SYMPOSIUM
“There’s no substitute for great light, not even somewhere as inspiring as Antarctica.“ Shot with a Canon 5DMkII; 24mm lens; 1/200secs; f/13; ISO 200.

"What role will penguins, birds and mammals play in the architecture of each shot, if at all?"

Blue ice adrift
Shot with a Canon 5DMkII; 24mm lens; 1/160secs; f/14; ISO 200

East Antarctica is the road less travelled where polar cruises are concerned. Very few ships make the long voyage south of Macquarie Island to explore the ice and snow of Commonwealth Bay or the Ross Sea. When you reach the Sub-Antarctic Islands there are almost as many penguins as pebbles, not to mention the graceful albatross that nest on windy saddles. But it isn't until you drop below the Antarctic Circle that the photography takes a turn into the mysterious world of ice.

And what lovely ice it is.

The ice of Antarctica is so abundant and diverse that every single day is a new exploration into the ever-changing landscape. Nature shapes frozen water in a myriad of ways. Sea ice tainted with a hint of yellow is created from the annual winter freezing along the coastline; glacial ice tumbles into the sea to create massive blue bergs; and fresh snowfall coats chunks of brash, bergs and pack ice with a fresh layer of pristine white. The combinations of these are endless, and differentiating the true source of a chunk of frozen water isn't always obvious. For photographers, this variety provides opportunity and challenge.

Shapes, textures, hues and motion appear and disappear in a flash. Sometimes you come across an ice monolith and have time to cultivate some inspiration through the lens, but more often than not a perfect moment of shivering brilliance lasts for barely a few seconds before being replaced by a new facade. Decisive moments are fleeting and hard to chase down, so you need to be armed with a game plan.

Are you planning to extract detailed frames of fragments within a berg using a telephoto lens? Are you aiming to shoot wide to draw in the texture of the sky for composition? What role will penguins, birds and mammals play in the architecture of each shot, if at all? Do you need or want to balance the sky and water with a graduated neutral density filter? Is snowfall on the bow or saltwater spray in the zodiac going to affect your equipment, or just ruin an otherwise brilliant image when droplets smear across the lens?

With a clear idea of what you want from each encounter with the ice, you now have a few technical challenges to deal with. Most people cite exposure metering as their primary issue when heading into snow and ice, and usually they're making a pitfall for themselves. I had several people on our cruise ask me about exposure compensation to »

GO WITH THE FLOE
Every passing moment is an exploration of an infinite variety of ice floes – with luck, populated by the locals. Shot with a Canon 5DMkII; 24mm lens; 1/125secs; f/13; ISO 100.

Hidden depths
Shot with a Canon 5DMkII; 24mm lens; 1/250secs; f/13; ISO 200

The thickest edge
Shot with a Canon 5DMkII; 24mm lens; 1/800secs; f/13; ISO 400

"All of the Canon and Nikon units on board were repeatedly exposed to the elements but at no point did they throw a hissy fit"

ICY RUNWAY
A snow petrel navigates along the edge of ice packs. Shot with a Canon 1DMkIV; 24mm lens; 1/400secs; f/13; ISO 800

balance out the expected errors when shooting on the Antarctic continent. One had been told by their camera store to underexpose everything by one stop, another had been told to overexpose by half a stop. Either strategy is misleading. The problem isn't that your camera will get it wrong; rather, you have wildly varying exposure conditions within a single frame. If 90 percent of your shot is brilliant white snow, then a few black penguins are likely to be underexposed in some way.

Alternately, if you're getting a decent close-up of a friendly Adélie penguin, you're likely to blow out some of the highlights through a white background. Either way you're getting a true exposure, as modern DSLRs are not easily fooled by a bit of ice or snow.

RAW beauty

RAW files gives you some flexibility in these situations and can take the worry out of exposure selections. Adjusting the dynamic range of a RAW image in post also enhances your ability to retain details across these exposure zones, even when they're heading in different directions. So long as the sun is shining you'll be hard pressed to get the exposure too far out of the ballpark, and if the sun isn't shining then the moody nature of dark skies and flat water give you a whole new canvas to play with. Do note that dust marks on your sensor will stand out most strongly under these cloudy flat skies, and you may need to up your ISO setting to get good depth of field in the dimmer light.

RAW files also give you room to move on the white balance without compromising quality. This is really the most difficult part of shooting in the ice and snow, as a slight skew in tint or temperature of the shot can yield dramatically inaccurate colours. It turns out there are different kinds of white, leaning to warm or cooler colours. It also turns out that the green and red balance can get whacked as well, often to compensate for imbalance in the colour temperature.

Aside from looking off-target when you upload images to Facebook, the major trouble caused by misaligned colour balance is the loss of detail. Subtle variance through the mid-range of grey levels is easily washed out by saturated tones and textures fall flat when the colour balance drifts. So avoid dialling up the colour saturation unnecessarily and pay attention to your white balance when processing the images. Snow on its own behaves pretty well on »

SURVIVING THE COLD

The common worry for travellers heading south is that their cameras will freeze up and never come back to life. Out of a few dozen DSLR cameras, only one four-year-old entry level model had trouble. One other ageing compact also went silly with a faulty sensor capturing funny pixels instead of clear images. All the serious SLR cameras were unfazed by the sub-zero conditions and occasional katabatic winds.

All of the Canon and Nikon units on board were repeatedly exposed to salty spray, snow and freezing temperatures but at no point did they throw a hissy fit. The main trouble with temperature I experienced wasn't the camera but my fingers. I had a fairly old pair of Windstopper gloves that are fine in calm conditions but simply not warm enough once the wind gets going. The early stages of a katabatic blast had me headed for the ship and avoiding prolonged exposure to the worst of Antarctic conditions. In some respects the comfort of your fingers is a good indication for operating conditions for your camera. SLR equipment works best when warm, so if your hands are too cold to hit the button, you might be outside the manufacturer's recommended temperature as well.

I did spend a lot of time watching for whales off the bow and chasing albatross off the stern, so I noticed those days when I let the gear really got cold. My Canon 1D MkIV showed some acceleration of battery consumption but otherwise performed exceptionally well in the ice and snow. I recharged three batteries in 26 days.

“It looked as though someone had put a blue filter across the lens”

LESS IS MORE

The conditions often push your technology to the limit of quality, and shooting from a gently moving ship makes it impractical to compensate for light with slow shutters and a tripod. It gets even harder when shooting from a zodiac, being tossed up and down by waves while dodging sea spray over the bow. It’s not impossible to shoot with a medium format system here, but the DSLR formats offer superior performance and flexibility until you get on solid ground. Or solid ice.

a sunny day, but overcast conditions are the worst. I had a particular day of shooting at Commonwealth Bay when the sky was bright but clouded over, resulting in a powerful saturation of UV light across the scene. This caused havoc with my colour balance, to my eye and camera accordingly. I was walking through a deeply tinted blue world and the camera captured an honest reflection of the tonal environment. The effect looked as though someone had put a blue filter across the lens, a result that simply fails to look natural even though it is. It’s one time when a corrective adjustment to white balance is in order. Without appropriate correction, the detail and texture of my images were washed out by the tint. Later on the sun made a brief appearance and the white balance was no longer an issue, so much so that the handful of shots taken in that half hour were easily the day’s best. There’s no substitute for great light, not even somewhere as inspiring as Antarctica.

Penguins on ice

Letting the light guide your photography is one of my most oft-employed mantras, but so is “get closer”. In Antarctica this rule pays dividends. A quality 70-200mm telephoto zoom is a vital part of any wildlife exploration, but a 24mm wide angle is not to be sneezed at either. Almost any shot that looks good through the telephoto will look even better if you can get up close and shoot it wide.

One evening in Commonwealth Bay we had a chance to return to shore and explore the landscape of ice for a few more hours. With the help of our expedition leader, I organised a couple of zodiacs for photo-fanatics to go get familiar with a few penguins on some nearby icebergs. The sun was threatening to kiss the horizon but a heavy sky to the north was throwing a dark curtain over the scene. Aside from a scattering of blue bergs that were drifting around the bay, our main attention was a set of flat sea ice slabs used by penguins to haul themselves out of the water. Hundreds of Adélies were gathered on a single berg, with a moody sky behind them and a massive blue berg splashing some colour into the scene. Grey skies in Antarctica yield a dramatic absence of colour and Adélies are easily the least colourful of penguins to match, with barely a hint of tone at beak and foot. If not for

A blue-tinted world
Shot with a Canon 5DMkII; 24mm lens; 1/500secs; f/13; ISO 400

What lurks beneath?
Shot with a Canon 1DMkIV; 24mm lens; 1/640secs; f/13; ISO 800

Reflected glory
Shot with a Canon 5DMkII; 24mm lens; 1/640secs; f/13; ISO 400

Grey – yet light – skies
Shot with a Canon 5DMkII; 24mm lens; 1/160secs; f/14; ISO 200

penguin poop and one blue background berg, the scene would have almost no colour at all. Allowing the light to guide me, I simply pointed my lens north and brought the elements into a single composition.

Forewarning our zodiac passengers that a wide-angle lens was the way to go, we prepared our cameras and rolled up alongside the edge of the slab. To our delight the Adélies exhibited their friendly nature and came across to visit. Helicopters screaming overhead will scare them to panic, as we saw a few minutes later, but a single zodiac slowly bumping into their berg can be cause to excite their curiosity. The penguins approached our zodiac for a closer look.

With wide angle lenses attached, we snapped a few dozen frames each, then circled back and forth to the point of satiation. I can’t say I got the perfect shot, but I got one of my best yet. Skies, colours, ice, wildlife and wide-angles; you won’t always be able to engineer a set of circumstance like this on a trip to Antarctica, but such moments are worth the wait. Patience is essential when dealing with ice, especially the thousands of years required to prepare a chunk of glacial berg that will turn blue as it melts into the ocean. That’s what makes the ice so nice.

The golden rule for landscape photography is to work hard on the foreground composition. Pristine wilderness and great light only goes so far. Building layers of subject matter is where your landscapes go from good to great.

In this case we just added penguins – lots and lots of penguins.

Images in this feature were taken on an East Antarctica voyage operated by New Zealand company Heritage Expeditions. They specialise in Subantarctic islands and cruises into the Ross Sea where tourism is a little more adventurous and the ice a little more abundant. Their Russian-built ship,* The Spirit of Enderby, *is ideally suited to expedition cruising in our southern oceans. heritage-expeditions.com