Master Your Winter Photography

A journey through the cold & icy world of Lake Baikal, Russia 11-18th March 2017

WHERE IS LAKE BAIKAL?

Lake Baikal is an ancient massive lake located in Siberia north of Mongolia. It is 640km long and 79km at its widest point and with a maximum depth of 1,632m. It is the largest freshwater lake holds 20% of the world’s freshwater. As it was formed 25 million years ago, it is the world’s oldest freshwater lake.

In winter, Lake Baikal is transformed into a vast frozen landscape with solid ice layer that can be nearly 3m thick. It is this icy and cold landscape that attracts visitors and photographers to this unique place. The average temperature in March is around -10 deg C, but it can drop to as low as -15 deg C.

HOW DO YOU PREPARE FOR THIS TRIP?

**Clothing** - Since the temperature is around -10 deg C, it is important to keep warm. Layered clothing with inner woollen thermal wear and outer waterproof layer is recommended. When temperature gets below -10 deg C, heat loss must be kept to a minimum. Woollen scarf, balaclava or caps or hood should be used. It is recommended to use gloves with ends that can be opened to expose the fingers. These make it easier to make adjustments to cameras and lenses.

**Footwear** - A pair of good quality hiking boots is important when walking on icy surface or on snow. It should be waterproof and lined to reduced heat loss. Thick woollen socks are highly recommended to keep one’s feet warm. As this trip involves walking on icy surfaces that are slippery, crampons are essential. A crampon is a device that is worn over footwear with sharp, pointed small spikes to prevent sliding on icy surfaces.

**Photographic Equipment** - Since my film days, I have always carried 2 camera bodies. The modern digital cameras are very reliable, but when subjected to extreme conditions, it is ideal to have a backup body. In this case, I brought along my Sony A7Rm2. This is primarily a landscape photography trip and as such my selection of lenses includes my wide angle lenses covering 16mm to 35mm. I included a standard zoom lens (24-70mm) in situation where I might need to use the 70mm focal length, as well as the FE Zeiss Sonnar 55mm F1.8. The longest lens for this trip was a 200mm lens.
Without doubt the issue of battery performance in low temperature becomes a concern. In this case, I brought along 4 batteries for the Sony. In order to keep the batteries warm, I kept them in a small pouch with a chemical heat pack. Extreme cold will increase the internal resistance of the battery and reduces its performance. For example, during one of the mornings, when we were shooting out in temperature about -10 deg C, the A7Rm2 battery lasted about 150 shots. But during the afternoon when the temperature went up to -2 deg C, it appeared to last much longer.

A good solid tripod is essential for landscape photography. When shooting the early morning sunrise or sunset late in the evening, exposures could run into seconds. It is recommended using spikes on the tripod legs to prevent sliding on icy surfaces. I brought along various ND and GND filters, but the sensor in the A7Rm2 has such a wide dynamic range, shadow recovery can be carried out without much noise penalty. In fact, for most of my images, I found that I rarely needed to use GND. As for ND filter, I tend to use the Smooth Reflection App, downloadable from PlayMemories camera Apps store as a substitute to achieve long exposure.

**Photographing Lake Baikal**

Each morning we loaded our gear into the 4x4 vehicles and in darkness we headed out to the lake. We travelled as far as an hour away from our guesthouse to viewpoints to shoot the sunrise. In places where the ice has shifted, pieces of ice, almost like shards of glass, were left lying haphazardly on this icy terrain. It is an almost surreal landscape, especially when the rays from the sun cast a warm glow over these pieces of ice.
Walking on this terrain with a large backpack and tripod, especially on the large pieces of ice required extra care. At times, one could hear loud noises as these pieces of ice cracked or even break into smaller pieces! Even with the crampons, we walked slowly and with trepidation on this cold and at times glassy and slippery surface.
Due to the purity of the Lake Baikal’s water we could see through the translucent ice as if looking through a sheet of glass. Often we could see bubbles trapped within the ice.

The landscape with its lines and random patterns became the foreground subject complimenting the distance subjects. These lines and patterns are the results of the shifting ice, just like fault lines in a geothermal region. At times we could hear loud snaps like distant thunders as this thick ice sheet shifted. These random lines and patterns are unique to Lake Baikal.

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Usually we will return to our guesthouse at about 10.00 am to have a late breakfast. We then rested and have a late lunch before we leave for our late afternoon and evening sunset shoot. Among the many features found in Lake Baikal are the ice caves or grottos in the winter.
Image on top: Shards of glass-like ice in the morning light A7Rm2 with FE Zeiss Sonnar 55mm F1.8

Image on top: Lines and random patterns became the foreground with rocky outcrop in the distance. A7Rm2 with ultra-wide angle lens
Image on top: Rugged and jagged outcrop rising from the icy lake. A7Rm2 with ultra-wide angle lens

Image on top: Unusual looking lines that penetrate deep into the ice that seemed to spread from the outcrop. A7Rm2 with ultra-wide angle lens
Here we set-up our equipment inside these caves or grottos to shoot the sunset or sunrise with the stalactite-like icicles suspended from the ceiling as the foreground. The light from the sunrise or sunset illuminated the suspended icicles resulting in warmish glows. However, the period to shoot the sunset was very short, roughly about 15 minutes before the darkness sets in.

Image on top: Sunset with starburst shot from inside an ice cave. A7Rm2 with ultra wide angle lens.

Image on the left: Strange and alien-like icicles. A7Rm2 with FE Zeiss Sonnar 55mm F1.8.

Image on top: Sunset with starburst shot from inside an ice cave. A7Rm2 with ultra wide angle lens.
Image on top: Sunset over Lake Baikal. A7Rm2 with ultra-wide angle lens

Image on the left: A sunset shot from inside an ice cave. A7Rm2 with ultra wide angle lens
Image on top: Reddish clouds over the sky. A7Rm2 with ultra wide angle lens

Image on top: Watching the last light of the day. A7Rm2 with FE Zeiss Sonnar 55mm F1.8 lens
For landscape photographers, winter in Lake Baikal is without doubt the season to capture the unusual features of this vast landscape. The crystal clear and icy surface with random crack lines with unique patterns create new perspectives for photographic composition that will delight landscape photographers. The light from the sunrise and sunset creates a contrast and mixture of warm and cold tones in the landscape.

The caves and grottos with icy stalactites illuminated by the warm glow from the sunset formed unique photographic viewpoints. Lake Baikal is a vast place of incredible beauty and during the few days we were there we only managed to see and photograph this part of Siberia. There are only a few places where I can safely say a return trip is necessary to explore further photographic opportunities. Lake Baikal is one of them.

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About the Contributing Author

Ng Ngok Swee first ventured into photography with a film rangefinder in his secondary school days. Soon enough, he was spending much of his time in the darkroom, developing mainly black and white photographs. After retiring from the workforce several years ago, Ngok Swee decided to devote his time to pursuing his two passions: travel and photography. Surreal images taken during his trip to North Island, New Zealand, made it to the top 10 finals in the Sony World Photography Awards, and were featured in the Sony Alpha Magazine. Several of his photos were also selected for publication in the Leica User Forum (LUF) Charity Books 2010 and 2012, while a photo taken at the Danakil Depression, Ethiopia, was featured in the CNN’s Top 25 Travel Photos of 2014.