

How to Avoid a Whiteout

... and other winter photography tips

by Dr. Robert Berdan

Unfortunately, when it comes to taking photos during winter, modern cameras can't do it all for you. Most cameras underexpose scenes that are predominantly white, resulting in snow that appears gray. To capture winter scenes correctly you'll often need to increase the exposure, but be careful: overexposing your image will create an image "whiteout."

The exact amount of exposure varies for each composition and depends on what other tones may be present. If the scene is mostly white, increasing exposure about 1.5 F-stops works well. If it contains dark tones such as trees, water or blue sky, then try increasing exposure by only 0.5 to 1 F-stop. Your camera manual should have exact instructions on how to alter exposure: just don't forget to reset it back to zero after you're finished. The correct exposure is critical when shooting JPG files, but if you're shooting RAW files, as many professional photographers do, you can finetune the exposure afterwards in Adobe Photoshop. In general, to obtain better exposures in winter, if it's bright, add light.

Most digital cameras function quite well in the cold, so long as you take a few precautions. If you are outside with your compact camera, keep it inside your coat pocket to keep the batteries warm. If you have a large SLR camera, keep it in an insulated camera bag wrapped in a small blanket or scarf and, to prolong battery power, store a chemical hand warmer next to the camera. Remember, always keep a spare set of warm batteries inside your coat pocket – lithium ion batteries should function for a couple of hours at -20 C. When bringing a cold camera into a warm moist room, condensation can occur on the sensitive electronic components and even inside the lens. If you take it back into the cold, the condensation could freeze and permanently damage your camera. To prevent that, keep your camera, or the entire camera bag, inside

a tightly-sealed plastic garbage bag before bringing it indoors, allowing your equipment to warm up gradually. Condensation may be allowed to occur on the bag, but not on your equipment. If you are traveling by car you shouldn't need to do this, as the air inside the car is usually dry. Most digital cameras can handle the wintery cold almost as well as film-based cameras, so feel free to take your digital camera outside.

For pristine winter landscapes, especially after a fresh snowfall, look for interesting shapes, tones, textures and contrasts. On overcast winter days, the usually soft and diffused light is ideal for portraits and sweeping landscapes, and the absence of colour can create some great black-and-white images. When processing photos with digital image editing software, shoot in colour and then convert your images to black-and-white, as it provides more control over the tones. On blue-sky days the angle of the sun can create a variety of interesting shapes and designs on the snow, with shadows tending to have a blue cast. To capture some colour in winter landscapes you will need to get out at sunrise or sunset. Alternatively, look for coloured barns, wooden fences, roads vanishing off in the distance, or other such subject matter to add colour.

I particularly like taking pictures when it's snowing: it just feels "wintery," and spotting wildlife in winter can be easier against the white snow. Deer, moose, coyotes and foxes are often found beside country roads. Keep an eye out for commonly found birds – eagles, owls, Snow buntings, Blue jays, dippers, sparrows, crows, ravens, ptarmigan and magpies – as well as the Rough-legged hawks, Northern Hawk owls and Snowy owls who visit our area between the end of October and March.

As with all seasons, the quality and direction of light during winter can help create effective photographs, while side-lighting can enhance the dimensionality and texture of snow or ice to create interesting shapes, especially among snow mounds.

I rarely use lens filters in the winter, but I sometimes use a 2 F-stop hard-edge neutral density graduated filter to darken the sky on white-sky days to make them look ominous. A polarizer can help deepen the sky's colour on blue-sky days, as well as darken the tone when photographing ice and water. If it is snowing heavily, you may have to turn your camera's autofocus off to prevent it from focusing on the snow, instead of the scene or your subject.

Hoar frost and rime form an opaque coating of tiny, white, granular ice particles caused by the rapid freezing of super-cooled water droplets on impact with a cold object. This beautiful type of ice usually forms after an evening fog to encrust trees, grass and fences, while snowflakes themselves are a form of frozen water with six-fold symmetry.

To sum it up, the main points you need to remember in order to capture spectacular photos this winter are:

- Overexpose winter scenes by 0.5 to 1.5 F-stops by using your camera's exposure compensation button;
- If possible, keep your camera and a spare set of batteries warm;
- To prevent condensation, place your cold camera inside a sealed plastic bag before bringing it into a warm, moist room;
- Search for interesting shapes formed by the snow and ice;
- Look for wildlife along rural roads and around unfrozen water;
- If it is snowing, consider using manual focus instead of autofocus. ■

Robert Berdan offers regular photography workshops and private training in Adobe Photoshop. For more information visit his web site and subscribe to his free newsletter. www.canadiannaturephotographer.com – (403) 247 2457 – rberdan@scienceandart.org



Crystallized snow and ice create a floating "pancake"



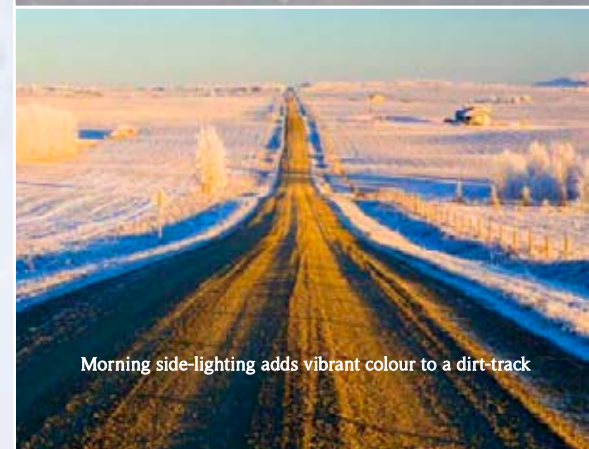
The stark contrast of an old red barn against a snowy backdrop



Spectacular rime formation



A Snow bunting nestled in some ground snow



Morning side-lighting adds vibrant colour to a dirt-track

A mule deer and her fawn stand out against the stark, frost-covered landscape