Winter Road Condition Awareness

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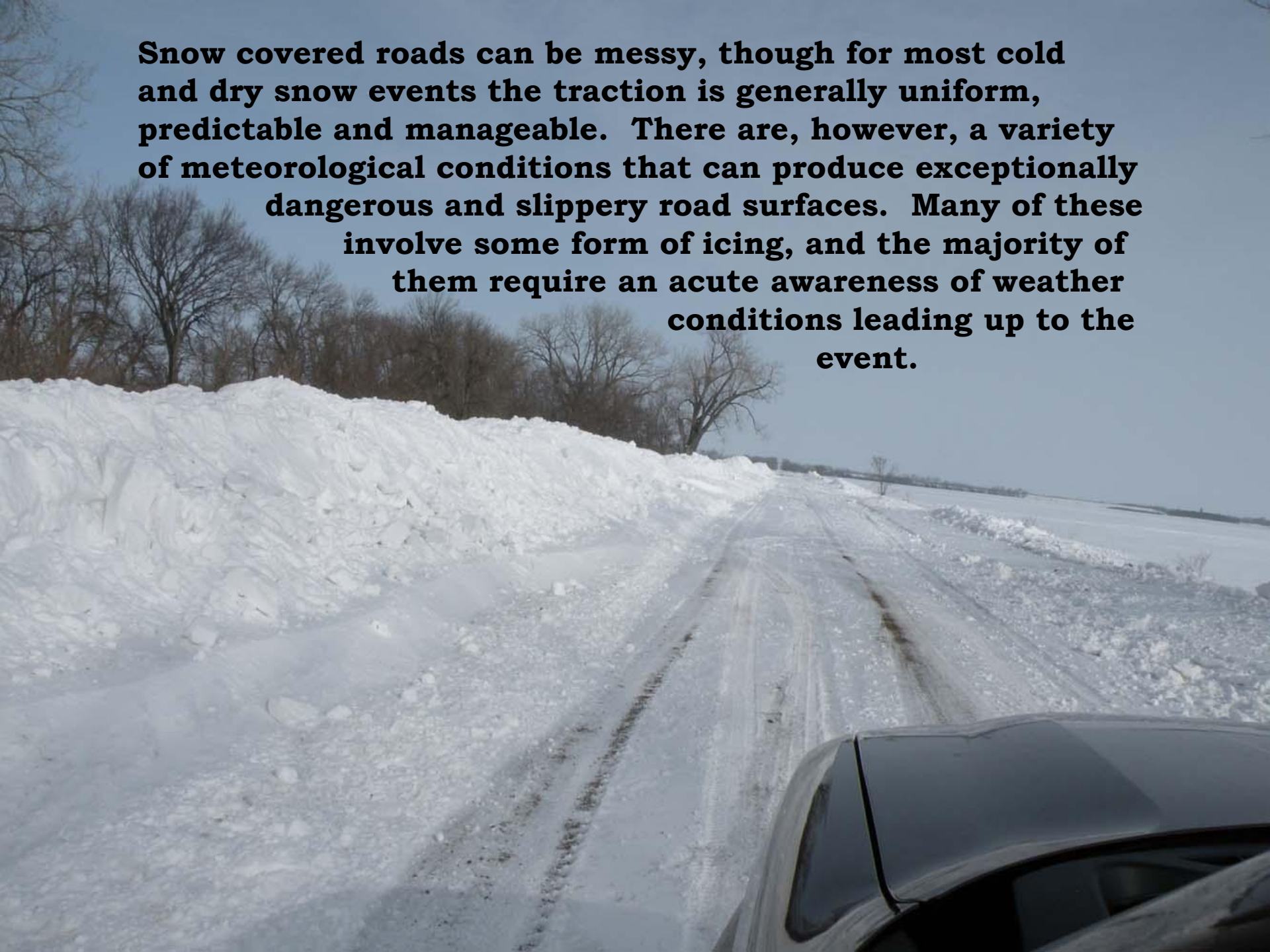
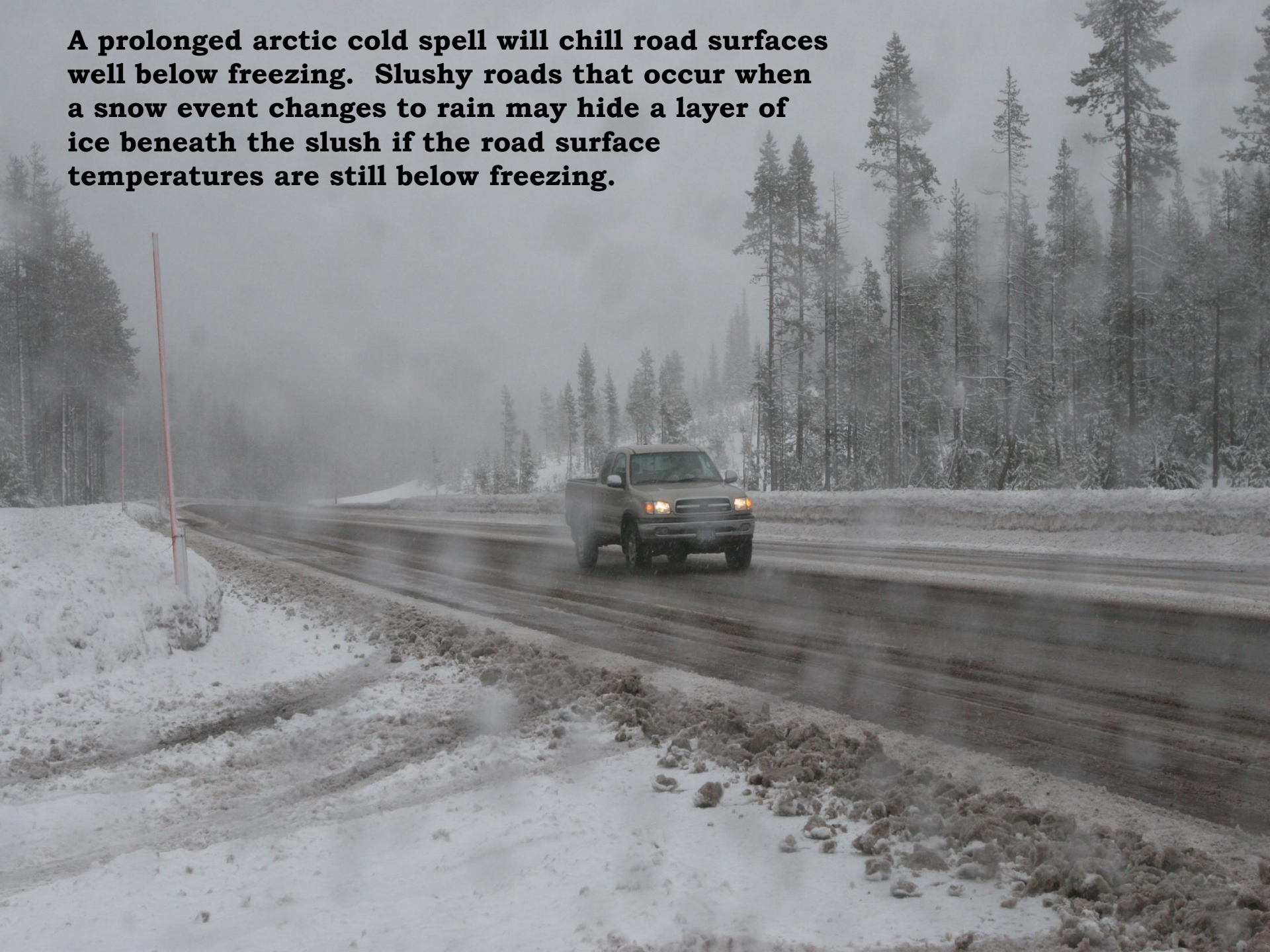


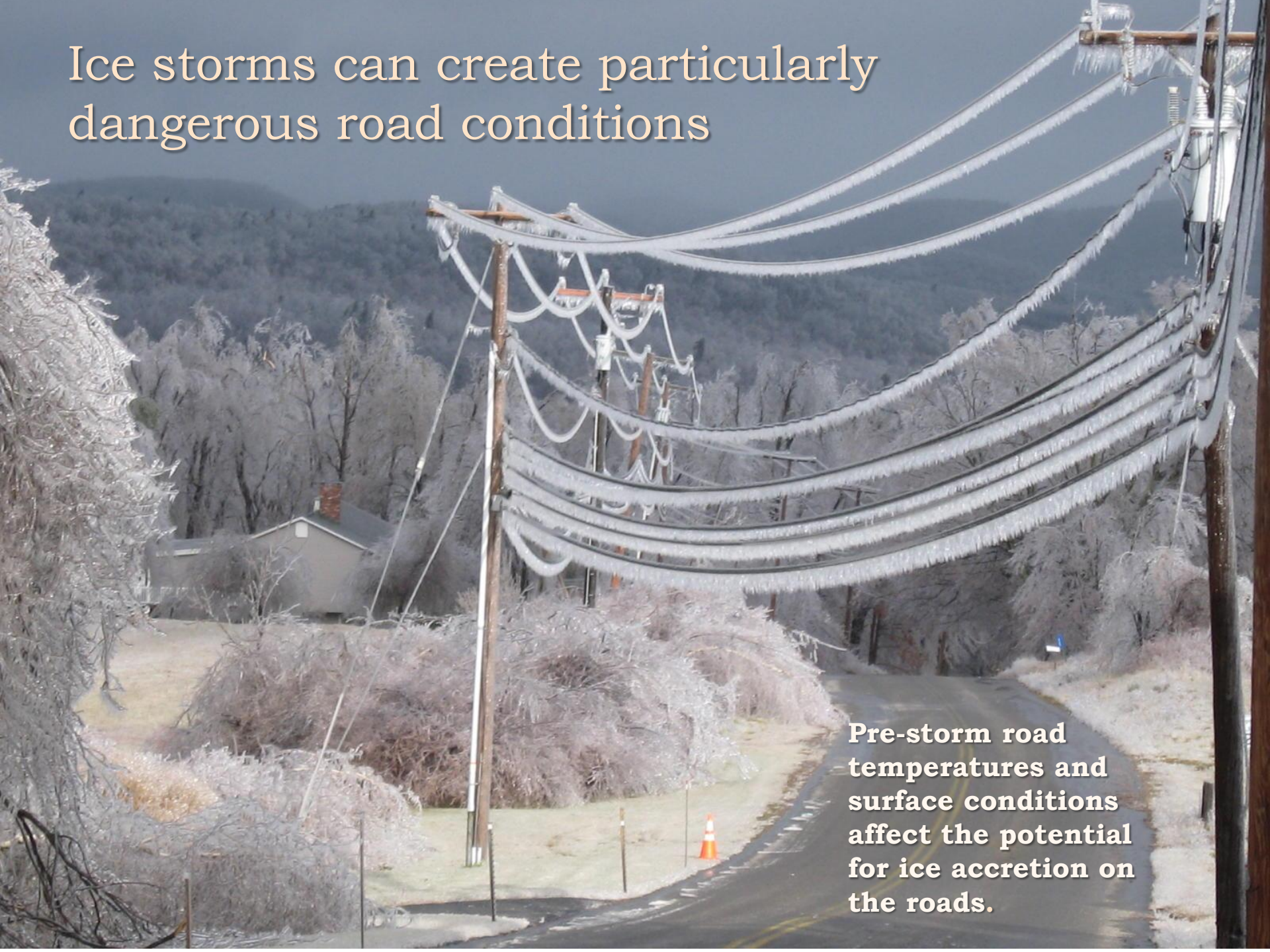
Snow covered roads can be messy, though for most cold and dry snow events the traction is generally uniform, predictable and manageable. There are, however, a variety of meteorological conditions that can produce exceptionally dangerous and slippery road surfaces. Many of these involve some form of icing, and the majority of them require an acute awareness of weather conditions leading up to the event.


A prolonged arctic cold spell will chill road surfaces well below freezing. Slushy roads that occur when a snow event changes to rain may hide a layer of ice beneath the slush if the road surface temperatures are still below freezing.

If light snow is falling with temperatures near freezing the traffic will melt the snow on roads making wet road surfaces.

If the light snow continues as temperatures fall, such as during a strong cold frontal passage, the moisture will remain on the roads and turn to ice.

Ice storms can create particularly dangerous road conditions



Pre-storm road temperatures and surface conditions affect the potential for ice accretion on the roads.

Freezing rain occurs as a cold rain falls into a thin layer of subfreezing air near the surface.

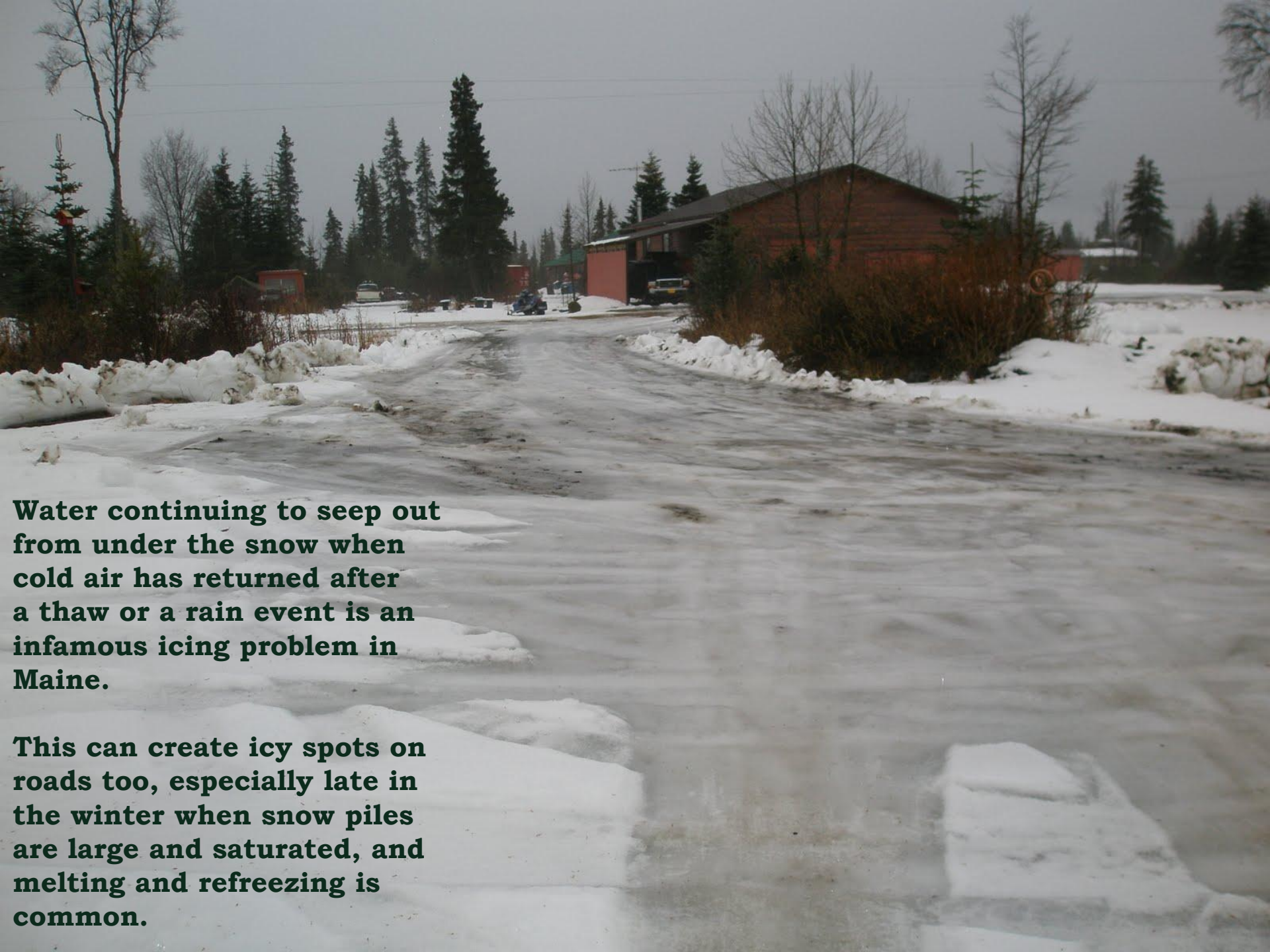
Road surfaces that have been washed clean of salt and sand by a previous rainstorm have a greater chance of becoming icy.

Low clouds and moisture moving in from the Maritimes ahead of a winter storm can produce a period of light freezing drizzle. Snow may then spread over the region hiding the icy roads beneath.

Common black ice condition

A cool, light rain at night with temperatures in the 30s may be followed by some clearing later at night. This can allow temperatures to fall below freezing while road surfaces are still wet resulting in black ice.

After a cold spell, warmer air moving in from the south may carry moist air into the region. If the dew points of the warmer air are higher than the road surface temperatures, ice will accrete on the roads resulting in black ice. This occurs most commonly Downeast, late at night or in the early morning, when warmer air moving in from the south carries moisture in from the ocean.



Water continuing to seep out from under the snow when cold air has returned after a thaw or a rain event is an infamous icing problem in Maine.

This can create icy spots on roads too, especially late in the winter when snow piles are large and saturated, and melting and refreezing is common.


Snow showers can melt on roadways from
traffic and sunshine, and then refreeze
from the cold wind creating icy spots.

Snow blowing over the roads can melt in the sunshine then refreeze on road surfaces in the cold wind creating icy surfaces. Motorists traveling on roads that appear mainly dry can suddenly and unexpectedly encounter ice where the snow has been blowing and drifting over the roads.

This is especially dangerous at bends in the roads where the ice may not be discovered until the last minute and where traction is most critical. This is a common danger in March when snow is deep and sunshine is stronger.

Being aware of road conditions involves being aware of how recent weather changes have affected road surfaces.

STAY SAFE THIS WINTER!!