

Brief History of Wyoming Snow Fence

Soon after Interstate 80 opened in October 1970 it closed. Massive amounts of blowing snow made the road impassible and required the use of rotary plows. In 1971, the first stretch of snow fence was installed and the frequent closures and intense maintenance all but disappeared. Since that time snow fence has been installed in many portions of the state, with the highest concentration remaining along I-80. Much research has occurred since the 70s to make snow fence as effective as it is today.



Structural snow fence is one of our most effective tools in fighting blowing snow

Wyoming Department of Transportation

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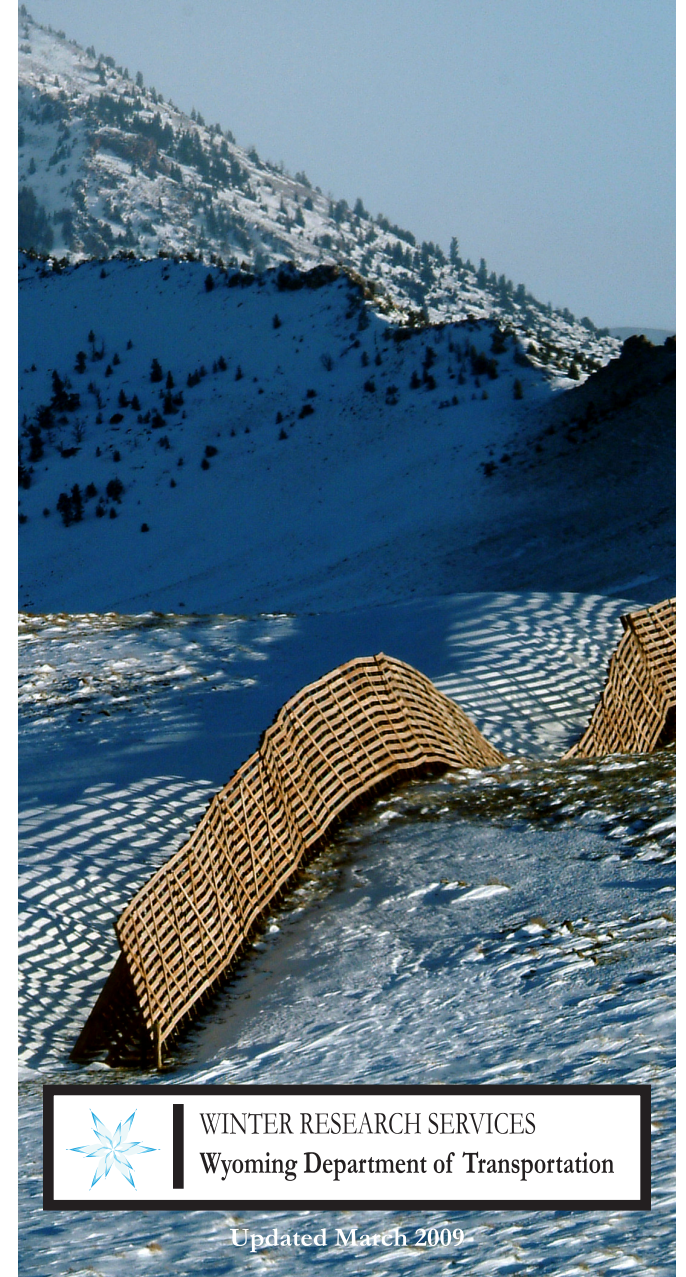
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Importance of Snowfence



WINTER RESEARCH SERVICES
Wyoming Department of Transportation

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It's no secret that Wyoming has an abundance of wind. It sweeps across our open prairies and rustles the aspen leaves in our mountains. However, it also leads to a dangerous driving situation—blowing snow.

Blowing snow is caused when wind picks up snow deposited during a storm and relocates it. Snow behaves a lot like sand in a stream bed. Sand is carried in water and then dropped where the water slows down. Sand bars in a river are a good example. The same holds true for snow. It will be held up in the air until it reaches something that slows it down. That something WYDOT uses is snow fence.

Wyoming-style snow fence is a wooden structure that stands between 6-feet and 14-feet tall. It is anchored with rebar driven deep into the ground. The boards on the face slow down the wind, causing the snow to build a drift at the fence and keep the snow from blinding drivers and preventing ice build up on the road.

Placement of Snow Fence

The Winter Research Services group (WRS) investigates the best location for new snow fence and the best way to improve existing snow fence. The physics behind the design means the process can take anywhere from a month to a few years. Field investigations ensure that the optimum location is selected each time.

If snow fence is placed too close to the roadway the drift builds onto the roadway surface. If the snow fence is placed too far from the roadway it fails to serve its purpose. Not placing snow fence at all means that a section of roadway is left unprotected, and the traveling public is put at risk.



The use of a temporary structural fence with living snow fence promotes rapid tree growth and leads to earlier fence efficiency.

Obstacles in placing snow fence

Much of the existing snow fence WYDOT maintains was built in the 1970s and many agreements were done with a handshake. As the years have gone by, we are finding that landowners have changed their minds or the original landowners are no longer there. It has become increasingly difficult to place or keep existing snow fence as subdivisions are established.

As more people move into the counties, there are more demands on WYDOT to maintain the roadways for greater numbers of travelers and to improve the safety of our winter roadways all while keeping costs down and doing more with less.

By improving our snow fence systems we can improve public safety. Snow fence is a low cost mitigation method to preventing blowing snow related accidents. It is highly effective and reduces crashes on Wyoming highways. It can only be effective if it is allowed to be placed in the proper locations.