

THE GEO-SAMPLER

geotechnics
geotechnical & geosynthetic testing
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Here at the GeoSampler, we enjoy discussing the weather just as much as the next guy. But when a recent report from the most venerable of all weather reporting outlets, the Farmers' Almanac, predicted this upcoming season to be 'clime and punishment,' well, it got our attention. So, as we prepare for, in their words, "a season of unusually cold and stormy weather," we thought we'd take a moment to dust off our snow shovels and rain boots and dive into the big chill known as winter.

OLD MAN WINTER STOPS TO VISIT.

When, exactly, is winter? It may not be as simple as it seems. While the calendar makers may tell you that winter in the USA begins at the solstice and ends on the following equinox—roughly the 21st or 22nd of December until the 20th or 21st of March, others are a little more slushy about the actual time period.

Meteorologists have been known to define winter as the three calendar months with the lowest average temperatures. In ancient Greek mythology, winter was the six months Persephone would desert Demeter and hang out with Hades. And the Welsh once believed winter was the period when Gwyn ap Nudd had the upper hand over Gwythr ap Greidawl and cuddled up with the maiden Creiddylad.



For most of us the onset of winter is kind of a "know it when we see it"—or better yet—feel it. Temperatures begin to drop. And if you happened to be in Prospect Creek Camp, Alaska, on January 23, 1971, you would know what it feels like at -80F. If you spent a short 24 hours in Silver Lake, Colorado, on April 14, 1921, you probably noticed that the snow piled up pretty fast. In fact, a record 75.8 inches—well over six feet—fell on that town, just northwest of Denver. When old man winter settles in Rochester, New York, he also brings a blanket—an average of nearly 100 inches of snow annually—making it the snowiest city in the United States.

While sometime around the middle of March it may seem that winter will never end, it probably won't equal **The Year Without a Summer**. The unusual coolness of the winter of 1815-16 and of the fol-

lowing summer was primarily due to the multiple volcanic eruptions beginning in 1910 and culminating in the eruption of Mount Tambora in Indonesia in April 1815. The cumulative effects were especially strong in the Eastern USA, Atlantic Canada, and Northern Europe. Frost formed in May in New England, killing many newly-planted crops, and the summer never recovered. Snow fell in New York and Maine in June, and ice formed in lakes and rivers in July and August. In the UK, snow drifts remained on hills until late July, and the Thames froze in September. Agricultural crops failed and livestock died in much of the Northern Hemisphere, resulting in food shortages and the worst famine of the 19th century.

While that notion may send you running for your electric socks, it would be like a chilly weekend in Wilmerding compared to the **The Little Ice Age**—a cold period lasting from 1550 to 1850. Persistent agricultural failures caused by the colder weather spawned witch hunts in Europe. On the upside, famous violin maker Antonio Stradivari produced his instruments during the Little Ice Age. The colder climate may have caused the wood used in his violins to be denser than in warmer periods, contributing to the unique tone of his instruments.

And, with all that said, we recommend embracing winter for all it offers up. Wax up the sled and enjoy the season. Maybe you'll even break the sled speed record—85.38 mph, set by Asle Strand at Tandadalens Linbana, Salen, Sweden on May 1, 1982. Just bundle up first.

The problem with winter sports is that, follow me closely here, they generally take place in winter.

—Dave Barry



Just because.

Beetles taste like apples, wasps like pine nuts, and worms like fried bacon.

What is called a "French kiss" in the English speaking world is known as an "English kiss" in France.

"Almost" is the longest word in the English language with all the letters in alphabetical order.

Human thigh bones are stronger than concrete.

Right handed people live, on average, nine years longer than left-handed people.

The elephant is the only mammal that can't jump!

Like fingerprints, everyone's tongue print is different!

Fingernails grow nearly 4 times faster than toenails!

Women blink nearly twice as much as men.

Months that begin on a Sunday will always have a "Friday the 13th."

Coca-Cola would be green if colouring weren't added to it.

The average lead pencil will draw a line 35 miles long or write approximately 50,000 English words.

Earth is the only planet not named after a god.

You're born with 300 bones, but by the time you become an adult, you only have 206.

Slugs have 4 noses.



IT WAS SO COLD ...

Winter just seems to bring out the hyperbole in all of us. But, truthfully, it was never so cold that your shadow froze to the sidewalk. But there are still a surprising number of outlandish facts about winter. Here are a few to warm your heart.

- A rare meteorological phenomenon encountered during winter is ice fog, which comprises ice crystals suspended in the air; it occurs only at very low temperatures, below -30°C (-22°F).
- Icicles form most often on the south side of buildings.
- The record for the most snow angels at one time was set in Ontario Canada, in 2004 when a couple of schools joined to create 15,851 snow angels.
- The wind chill factor measures heat loss from exposed skin.
- If it gets cold enough, single digits or below, ice crystals can form and snow can fall from clear skies.

- All snowflakes have 6 sides.
- Antarctica set the record for the worlds coldest temperature at -129 (degrees Fahrenheit)
- Average snowflakes fall at 3.1 mph



- The winter of 1932 was so cold that Niagara Falls froze completely solid.
- Ice is a mineral.
- Billions of snowflakes fall during a storm, even a small storm.
- Hot water freezes faster than cold water.

- The "winter blues" were first diagnosed in 1984. And have recently been named seasonal affective disorder or S.A.D. (seriously).
- Ten inches of snow melts down to one inch of water.
- The tallest snowman was 113 feet 7 inches tall, named Angus and made in Bethel, Maine, in 1999.
- Nine years later in 2008 this same town created the world's tallest snowwoman. The snowwoman stood 122 feet 1 inch tall.
- The largest snowflake recorded in the Guinness World Book of Records fell in Montana and was reportedly 15 inches wide.
- The amount of snow that falls each year weighs about a million billion kilograms, according to physicist Jon Nelson at Ritsumeikan University in Kyoto, Japan.

Snow driving or pile driving?

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Pittsburgh – 544 Braddock Avenue • East Pittsburgh, PA 15112 • Phone (412) 823-7600 • dbackstrom@geotechnics.net or jpkline@geotechnics.net
Raleigh – 2200 Westinghouse Boulevard • Raleigh, NC 27604 • Phone (919) 876-0405 • msmith@geotechnics.net