

Minnesota Countryside

The Great Cold Wave of 1912



Weather Watch

By MARK SEELEY

Key Points

- January 1912 is most famous for "The Great Cold Wave."
- Transportation suffered as idled railroad and trolley cars froze to the tracks.
- In Zumbrota, the temperature dropped to -36 degrees F on Jan. 12, 1912.

BASED on the combined Smithsonian, Signal Corps and National Weather Service climate records in Minnesota (1871-2011), there have been only four Januaries when the average monthly temperature was below zero degrees F at every location in the state.

In chronological order, these years were 1857, 1875, 1888 and 1912.

The most well-documented of these years is 1912, when there were 80 National Weather Service cooperative observing stations scattered across the state. As a result of these more detailed climate observations, January 1912 is the only one of these extreme cold months that can be analyzed completely for duration and intensity. Using the cooperative observer network, January 1912 ranks as the coldest in state history (statewide mean value of -8.2 degrees), over 4 degrees colder than the second coldest of January 1929 (-4.1 degrees).

Most often referred to as "The Great Cold Wave" in weather lore, the spell of cold weather in January 1912 came in the midst of one of the coldest winters across the entire North America continent. Many daily low temperature records were set across Canada, and the Great Lakes and Midwestern states.

The widespread cold consequently produced ice cover that was nearly complete and quite thick on all of the Great Lakes. On Jan. 29, 1912, reports of ice thickness on Lake Superior ranged from 12 to 29

inches. At Moorhead, the reports showed that ice on the Red River was 32 inches thick, while at La Crosse, Wis., the ice on the Mississippi River was 2 feet thick by the end of January. All of these ice measurements are much greater than normal.

Evidence of the consequences of the prolonged and intense cold wave can be found in newspapers and government documents from 1912. Transportation suffered as railroad and trolley cars that were left idle too long became frozen to the tracks. Workers had to use fire and steam to thaw the steel wheels before the cars could be moved, causing many delays.

In turn, these transportation delays were problematic for coal deliveries to cities that relied mostly on this fuel for heating and steam generation. Consumption of heating fuels (coal, oil, wood) was very high, and some fresh water supply systems froze up as well.

It was so cold ...

So what are some of the major climate records and characteristics of this famous 1912 cold wave? Perhaps foremost is the duration of the extreme cold. At Hallock in the north of the Red River Valley, every night of the month except for Jan. 31 brought a low temperature reading of zero degrees or colder. Amid the intense cold arctic high-pressure system on Jan. 6 (30.60 inches on the barometer), Hallock



reported a morning low of -41 degrees and an afternoon high of -24 degrees, one of the coldest days in state history.

As far south as Zumbrota in Goodhue County, the temperature dropped to -36 degrees on Jan. 12.

For many residents, the bite of the cold air temperatures was magnified by extreme windchill, a term that the National Weather Service had yet to invent.

We can take hourly measurements (temperature and wind speed) from that January and reconstruct the magnitude of the windchill conditions. During the first half of January, windchill conditions ranged from -50 to -70 degrees, truly dangerous values. Exposed skin can freeze in just 5 minutes or less.

If Minnesota residents saw a silver lining in the Great Cold Wave of 1912, it was probably associated with the great ice block harvest from area lakes. The ice, used in refrigeration units for the spring and summer, was thick and abundant.

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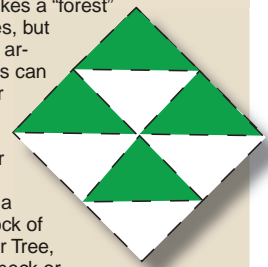
Quilts From the Past

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Thanks to Karen Bogati, Spencer, Iowa, for redrafting the historic patterns you see on these pages.

Sweet and salty treat

WHETHER it's breakfast, lunch or dinner, every meal is better with some biscuits on the table. These biscuits combine the salty crunch of bacon with savory sweet potato. Eat them alone or split them in half and slide in a slice of ham for a delicious sandwich. And they're great for between-meal snacking, too — especially when you have honey butter on hand for that extra touch of sweetness.

For more recipes, visit www.porkbeinspired.com.

Bacon and Sweet Potato Biscuits With Smoky Honey Butter

Biscuits:

- 2 slices bacon, cut crosswise into ¼-inch strips
- 1 medium, or two small, orange-fleshed sweet potato (14-16 ounces total), peeled
- 2 cups flour
- 4 teaspoons baking powder
- 1 tablespoon sugar
- 1 teaspoon baking soda
- 1 teaspoon salt

- ¾ teaspoon allspice
- 8 tablespoons unsalted butter, cut into ½-inch cubes and chilled
- 1 cup buttermilk (lowfat is OK)

Honey butter:

- 8 tablespoons unsalted butter, softened
- 2 tablespoons honey
- Salt

Wrap the sweet potato with a damp paper towel and microwave on high until very soft, three to four minutes. Transfer to a bowl, mash with a potato masher and set aside to cool. Meanwhile, in a medium skillet over medium heat, cook the bacon until golden and crisp, about eight minutes. Use a slotted spoon to transfer bacon to a paper-towel-lined plate, then set aside to cool. Set aside 2 tablespoons of bacon drippings from the skillet.

Preheat oven to 375 degrees F. Line a large baking sheet with parchment paper.

In a food processor, combine the flour, baking powder, sugar, baking soda, salt and allspice, and pulse a few times. Add the



cubed butter and pulse to make a coarse meal with a few pea-sized pieces. Transfer mixture to a large bowl and gently mix in the bacon, buttermilk and 1 cup of the mashed sweet potato (save any remaining potato for another use).

Transfer mixture to a floured work surface and knead a few times to form a dough. Pat the dough to about 1-inch thick, then gently fold in half. Gently repeat four more times. Roll the dough out to a ¾-inch thickness, and then use a floured 2½-inch biscuit cutter to cut dough into biscuits,

arranging them on the prepared baking sheet. Gather the scraps and repeat to make a total of 12 biscuits. Bake until the biscuits are browned and a tester comes out clean, 15 to 18 minutes. Meanwhile, combine the softened butter, honey and reserved bacon drippings, mixing until smooth. Add salt to taste.

Serve the biscuits with the honey butter on the side. Makes 12 biscuits.

Suggestion: You can substitute 3 cups biscuit mix for the flour, baking powder, sugar, baking soda and salt.