Sunday's the day: Groundhog Day forecasts of P.E.I.'s winter are still not very accurate

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Shubenacadie Sam

It is that time again for our famous animal weather forecaster, the Groundhog, to predict whether there will be an early end to our nasty winter, or whether there will be six more weeks of this cold and snow. Every February 2, on Groundhog Day, a furry little creature crawls out of his hole, and if he sees his shadow (meaning the weather is bright and clear) then six more weeks of winter are expected.

Why February 2? This weather myth comes originally from Candlemas Day marking the midpoint of winter —



halfway between the shortest day of the year and the spring equinox. The original old rhyme goes: If Candlemas Day be fair and bright, Winter will have another flight; But if Candlemas Day brings cloud and rain, Winter is gone and won't come again. Just substitute "Groundhog" for "Candlemas Day" and a new myth is born. Groundhogs have become celebrities across North America including Punxsutawney Phil in Pennsylvania, Wiarton Willy in Ontario (an albino groundhog) and even our own Atlantic Region's Shubenacadie Sam in Nova Scotia. Is it time for P.E.I. to get its own weather forecasting groundhog? Perhaps we can name our little mascot Rusty after our red soils.

Unfortunately, matching Groundhog Day forecasts for Prince Edward Island with climate observations shows accuracy only about a third of the time, or once every three winters. Having said that, our Rusty is on a bit of a role recently predicting the early arrival of spring for the past three years running. What about this year? Look at yesterday's weather and if it was bright and clear, then six more weeks of winter are ahead.

Environment Canada uses more sophisticated methods than a mammal to forecast the seasonal weather. Climate models — mathematical equations strung together that describe the physics and chemistry of the atmosphere — are run on the largest computers in the country, known as supercomputers. These are the same computers that forecast our daily weather, and do the global climate forecasts for 100 years from now. Millions of our taxpayer dollars have gone towards these forecasting efforts over the years.

Environment Canada forecast the winter of 2014 to be "normal" in western P.E.I. and "warmer and wetter" in eastern P.E.I. I must mention, however, that Environment Canada's seasonal forecast models are accurate for Prince Edward Island only 40-50 per cent of the time, which is not significantly better than chance (meaning flip a coin and you'll have the same odds of getting the forecast correct). Environment Canada's seasonal forecasts are modelled well in Northern Quebec, the southern Yukon and Baffin Island, but here on P.E.I., not so well.

So while scientific studies continue to show that the human ability to predict chaotic systems such as weather is limited to three weeks, we have not found any other means to forecast the weather further into the future (monthly or seasonally). Even with the help of our furry little friends.

Notes about last month's weather. January 2014 was about as cold as normal (around -7.4 degrees Celsius), and dryer than normal, that is, not as much snow although I am sure that many are tired of what snow remains. January 2014 was about as cold as last January, but there was more snow this January than last. Remember the final week of January in 2013? Temperatures reached record levels for January 30 peaking at plus 9.9 degrees Celsius in Charlottetown, breaking the old January 30 record of 7.8 degrees that had stood for more than a century (1910), and

reached plus 8.7 degrees in Summerside, breaking the old January 30 record of 7.2 degrees set in 1938. The following day was even warmer at 11.2 degrees in Charlottetown, shattering the old January 31 record set in 1938 when the capital city reached 8.9 degrees. Summerside was at 11 degrees, topping the old January 31 mark of 8.9 degrees set in 1953.

Temperatures dropped 20 degrees by nightfall that day returning to more seasonal temperatures but it was a great reprieve in the middle of last year's winter. We should hope for a similar break this year. Since it happened in January in 2013, and in March in 2012, my guess is a mid-winter thaw will happen in February this year.

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