

Context:

Gabriola climate

Citations:

Museum History Committee, Frozen harbours, *SHALE* 8, pp.35–39, June 2004.

Copyright restrictions:

Copyright © 2004: Gabriola Historical & Museum Society.

For reproduction permission e-mail: nickdoe@island.net

Errors and omissions:

Date posted:

August 21, 2017.

Frozen harbours

by the Museum Society History Committee—Barrie Humphrey, E. Joyce White, Lynda Poulton, and Nick Doe

For most Canadians, listening to Gulf Islanders talk about severe winters must be rather like it is for us listening to someone from back east tell how they once caught a fish weighing half a pound. But, every now and again, we do get caught in streams of cold arctic air that flow down the inlets on the eastern side of the strait. According to Environment Canada, in January 1950, the temperature at Nanaimo dropped to a respectable Canadian winter low of -18°C , and judging by the anecdotal evidence, this was not the first time it had ever been that cold.

One good winter story, unfortunately now at least third-hand, is that of an elderly resident of Gabriola who vividly recalled as a young girl hearing the sound of ice grinding away in False Narrows as the tide went up and down beneath it.

The Akriggs, in their *British Columbia Chronicle*, open the entry for the year 1862 in similar fashion:

“The New Year ushered in one of the severest winters ever recorded in British Columbia. At New Westminster, patches of ice began to drift down the Fraser and gradually the frost froze these together into great flows. Carried up and down by the flood and ebb of the tide, they made a continual clashing night and day as they



Frozen Silva Bay (no other details). The original is lightly coloured; we guess it dates from the 1950s or early 60s.

Gabriola Museum Archives

struck against each other. Finally the river froze completely.”¹

The 1860s were nearing, but not quite at the end of the 500-year cold snap dubbed the “Little Ice Age”, a very readable account of which has been recently been published by Brian Fagan.² Written records of local events related to the cold weather are scarce,

¹ The severity of the northern winter of 1861–2 is widely reported, particularly in American Civil War (1861–5) literature. Unusual weather was also recorded in Australia and Southeast Asia, which suggests that a “La Niña” event was the culprit.

² Brian Fagan, *The Little Ice Age—How Climate made History (1300–1850)*, Basic Books, 2000.

maybe because, at the time, nobody thought they were that remarkable, and also not many people had the time or inclination to keep a diary—they were too busy coal-mining or farming.

In January 1854, the Nanaimo Day Book (Post Journal) kept by Joseph McKay for the Hudson's Bay Company (HBC) recorded:³

- Jan. 5, 1854 Hard frost. Nanaimo harbour covered with ice all over.
- Jan. 7, 1854 The *Otter* arrived; anchored inside of Tide-Staff Point, Commercial Inlet, and the greater part of the harbour being frozen, she could not come any nearer.
- Jan. 24, 1854 People employed as on yesterday carrying coals to the *Rose* on the ice, which is now four inches thick.
- Feb. 4, 1854 Despatched an Indian to the long[e] lake at the back <or inland> of Departure Bay to report on the thickness of the ice on that lake. He returned in the afternoon with a measure of 15 inches, which he maintains is the true thickness of the ice there. Sent Lazard and Thomas to ascertain the truth of the Indian's report.⁴

Now you might wonder, as we did, why Joseph McKay felt it necessary to have *two* of his staff go and check the word of *one* Indian, and for that matter, why the

thickness of the ice on the lake [presumably Long Lake], mattered that much. One idea we had, admittedly a rather feeble one, is that McKay, who was interested in natural phenomena, liked to be absolutely sure that the data he recorded was correct. A better idea however is that McKay just wanted Lazard and Thomas out of his way for a couple of days. Thomas was reported to be "...a wild and quarrelsome fellow...often mixed up with drunken carousals and brawls..."⁴. But the best idea of all is the suggestion that at the back of his mind McKay had the idea of *selling* the ice.

More than any other decade, the 1850s were a time when the HBC was diversifying its commercial activities. Apart from getting into coal mining, they were exporting from Fort Langley, salmon, cranberries, and a whole range of farm produce—oats, hay, milk, butter, beef, pork, potatoes, and vegetables. Looking for new things to sell was part of every HBC employee's duties in those days, and McKay would have been well aware that the HBC's equivalent company in Alaska, the Russian-America Company, was making lots of money shipping ice to San Francisco.⁵

However, whatever the reason, the thickness of the ice on the lake was only of passing interest, for two days later McKay wrote in the Nanaimo Day Book:

- Feb. 6, 1854 Lazard and Thomas did not return from their excursion to the lake until late this evening having fallen in with a herd of

³ The original is held in the Nanaimo Community Archives.

⁴ According to Mark Bate (Nanaimo Free Press, Mar. 23, 1907), Lazard Oreasta was a Métis carpenter, and Thomas Sagoyawatha (one-armed Tomo) was an Iroquois axeman. Thomas crossed Vancouver Island from Qualicum to Alberni Inlet in the company of Adam Grant Horne in May 1856.

⁵ At the height of the trade, which started in 1849, ice was fetching \$75 per ton in California compared with a mere \$12–15 per ton for coal. In January 1853, the brig *William* cruised up Howe Sound unsuccessfully looking for ice while waiting for coal to be dug at Nanaimo [Post Journal entry]. The Californian ice market collapsed as the gold rush there waned, effectively ending in 1857.

elk of which they succeeded in shooting two.

There is no further comment in the Nanaimo Day Book on ice, so we assume that the initial report was correct, or it warmed up, or the elk were far more interesting and they forgot why they had gone to the lake in the first place.⁶

In 1862, the opening paragraphs of the British Columbia Chronicle reporting ice conditions at New Westminster say:⁷

“An enterprising American surprised the Indians by putting on skates and skimming along the ice at an amazing speed. Hockey sticks were cut from the forest, and the male portion of the population: officials, parsons, store-keepers, woodmen, and Indians, were engaged in this exciting game upon the broad river.

“The ice grew thicker and thicker, and after a while, cattle and even carts travelled up and down the Fraser. For eight entire weeks the ice was so thick that no steamer could break its way through to New Westminster and the little capital was completely cut off from the world. Those from outside who simply had to get to New Westminster or to the road to the Interior arranged to be landed on the shores of Burrard Inlet or Semiahmoo Bay, and travelled overland from there.”

One of the persons who played hockey on the frozen Fraser was the Rev. John Sheepshanks, rector of Holy Trinity Church at New Westminster. Later, he would return to England and in time become Lord Bishop of Norwich. In *A Bishop in the Rough*,

⁶ According to the signage on the new Island Highway, elk still do live in the area, though few we have spoken to have actually seen them. The elk were probably Roosevelt elk (*Cervus elaphus roosevelti*). Remnant herds of this once-common species still do live in the Nanaimo Lakes area.

⁷ G.P.V. Akrigg and Helen B. Akrigg, *British Columbia Chronicle, 1847–1871*, pp.232–233, Discovery Press, 1977.

compiled by one of his clergy using excerpts from Sheepshank’s diaries, we find a vivid description of this incredible winter:

“My blind fell down the other morning, and I fastened it up again by driving a nail in with my sponge. I cannot easily comb my hair, for it is frozen together....

“All the bed-clothes near my mouth are stiff with ice. When one proceeds to breakfast, the cups and saucers are stuck hard to the cupboard. The bread is frozen, and must be put into the oven before it can be eaten. The ink is solid, and in the evening the camphine will not burn.”

The severity of that same winter, 1862, was also recorded at Nanaimo:

“A wharf had been erected in 1858, but it was not suitable for all ships, while a report in 1862 tells of a winter so severe that coal had to be carried by Indians across the ice of the harbour to the vessels waiting at the edge. The fact that the Indians wore nothing but blankets thrown over their shoulders and no covering on their feet amazed the onlookers, but the Indians of the Coast Salish had never been known to wear moccasins.”

Francis Norman, an officer aboard the *Tribune*.⁸

Later harsh winters were recorded in the local paper (NANAIMO FREE PRESS):

1875, Jan. 29 Nanaimo harbor frozen over as far as Protection Island.

Golden Jubilee Edition, 1924

1876, Jan. 26 Harbor frozen over from Protection Island to Departure Bay.

Golden Jubilee Edition, 1924

1880, Dec. 25 CLOSED: The channel past Newcastle Island to Departure Bay is closed with

⁸ Norman, F.M., *Martello Towers in China and the Pacific*. Allen 1902; quoted in Johnson, Patricia M., *A Short History of Nanaimo, 1858–1958*, p.13, published by the City of Nanaimo BC Centennial Committee, 1958.

ice, and vessels are compelled to take the outside passage.

1893, Feb. 4 Valdez Island. [now called Quadra Island]

Very severe weather has been experienced here for the last 9 or 10 days. On Sunday and Monday morning last the thermometer registered one below zero [-18°C]. Everything that could freeze is frozen tight, all the little bays in the harbors (and some of the harbors too) are ice bound. Today snow is falling, it is intensely cold, and the snow is as fine as flour.

Thursday morning, Feb. 2nd, the thermometer registered 2 above zero, about a foot of snow is lying with signs of more coming, verily this is the coldest snap ever had here for many years, so say the oldest inhabitants (the Indians).

RANCHER

As we move on into the 20th-century, tales of the “coldest winter on record” become more common. There is of course the oft-told story that in days gone by you could walk between Gabriola and Nanaimo over the ice in winter, and the story is undoubtedly true, though it probably didn’t happen quite as often as some old-timers would have you believe.

One of us (Lynda) recalls years ago being told by an elderly patient, a former RCMP officer, that he used to come over to Gabriola from Nanaimo once a week (times have changed) and that one winter he did make it across entirely on foot. That probably would have been, Lynda estimates, in the 1930s.

Long-time Gabriola resident Rick Avremenko recalls being told that:

“...the weather isn’t nearly as cold as it used to be...I used to walk across to Newcastle and Protection Islands, and it was nothing to see people skating across...”.

Jimmy Rollo

Jimmy Rowan is another who tells how he “walked over” in the late 50s or 60s.

And for those of you who would like to hear of something more recent, in February 1989, believe it or not (how soon we forget), the Nanaimo daily newspapers were reporting:

“...A massive and unusually strong area of high pressure over the Yukon produced winds up to 150 km/h through some mainland inlets. These winds were expected to bring continued bitter Arctic air to the East Coast of Vancouver Island. On Tuesday...the temperature...dropped overnight to a low of -12.7°C, a new record for February 1.

“Thursday’s...overnight low was -10.8°C. Flurries were expected to interrupt periods of bright sun, as the strong Arctic ridge held stable. In Nanaimo harbour the atypical low temperatures ... produced a thin layer of ice. ‘There are two inches close to shore and there’s a thin skim right across’, said Protection Island ferry operator Hilda Banerd. ‘Of course you can’t walk on it and most boats can get through.’ Close to the Protection shore some boats were frozen to their moorings....

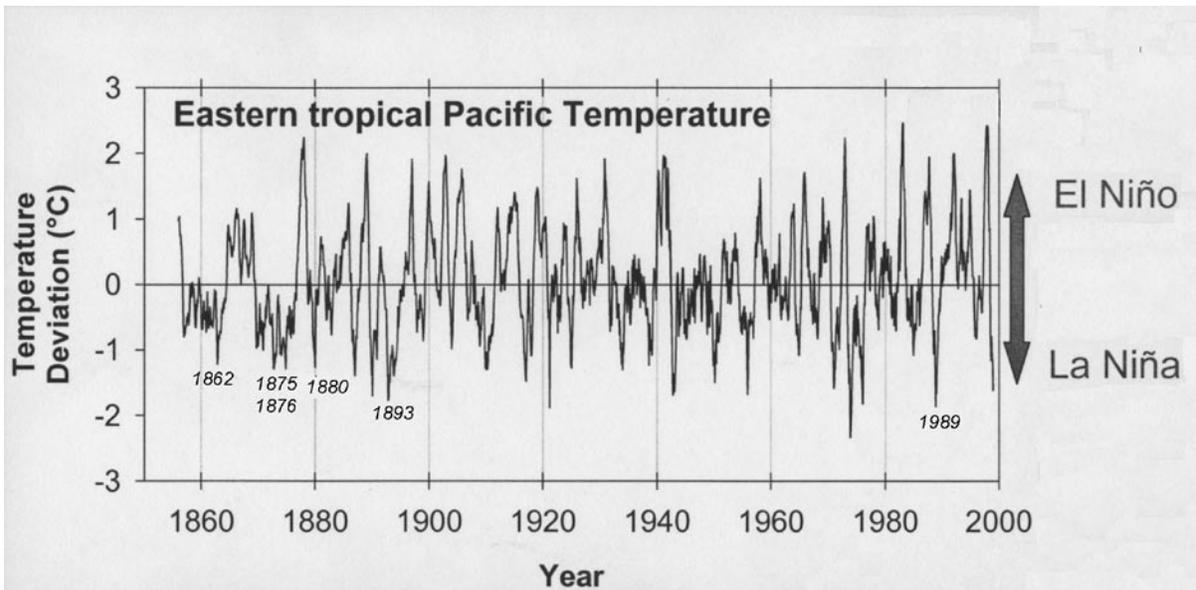
“Friday’s...overnight low dropped to -16.7°C. Temperatures were expected to remain below 0°C for several more days.”

The summer edition of the walking-to-Nanaimo story is of course that the bull-kelp used to grow so thick that you could do ditto. If it happened as often as some people tell it, it makes you wonder why they needed a ferry. ◇

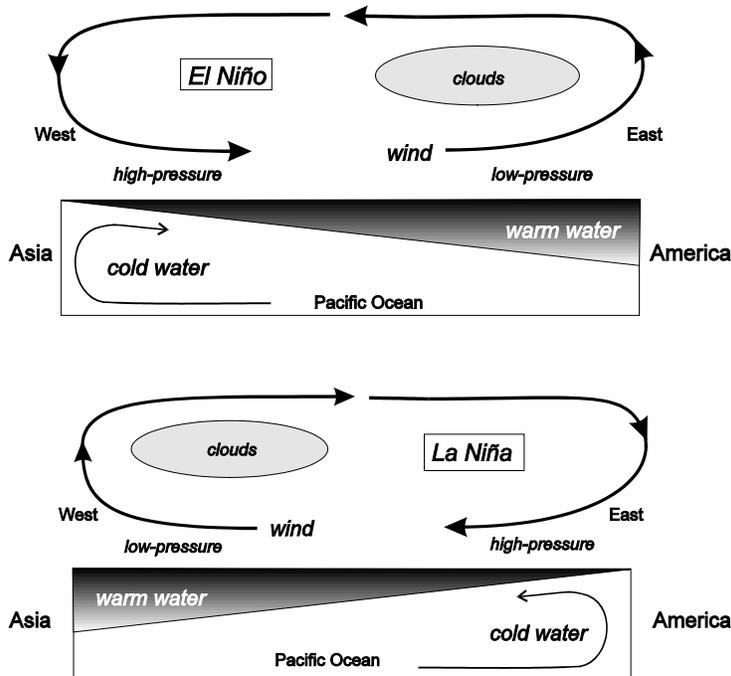
El Niño / La Niña postscript

It wasn't until after we had finished our article on "Frozen Harbours" that we came across the following graph on the Internet.

It shows the El Niño / La Niña years since 1857. Remarkably, practically all the years we had mentioned in the article show up as La Niña years. ◇



Adapted from Kim Cobb, California Institute of Technology



The diagrams show only disturbances; there is also an unvarying trade wind that blows east to west.

In **El Niño** years, surface winds at the equator have an abnormal west to east (left to right) component, driving warm surface water against the coast of the Americas. Warm water and cloud cover keep winters mild.

In **La Niña** years, the weather pattern is the mirror image. Surface winds at the equator have an abnormal east to west (right to left) component, driving warm surface water away from the coast of the Americas. Cold upwellings and lack of cloud cover keep the winters cold.

These weather disturbances are only quasi-stable, and the weather system in the Pacific flips from one to the other and back again over periods of 2–7 years in a seemingly random, but, in fact, predictable fashion.

Chen & al., *Predictability of El Niño over the past 148 years*, Nature, **428**, 733–736, 15 April 2004.