Canada's History Magazine for Kids

5

2

0

,

PM #40063001

Canada's tory

#87

FEB 2024 \$5.00 CDN A A A A A A

0

C

ζ







MODERNIZING MANITOBA FARMS

G

C

#### CONTENTS

COVER STORY	Psst! These symbols spell Kayak in Inuktitut.
Dark, Dirty & Dangerous Your life before electricity	4
<b>Power to the People</b> Making and moving electricity	6 Cover Illustration
<b>Off and On</b> Changes that lastedand didn't	12 ELEVER
<b>Heart of Home</b> A Quebecois kitchen changes	16 THERE S MORE 3 UpFront 14 YourStory
Manitoba TransFARMation Power comes to rural people	20 26 Backyard History 28 Games 30 Answers



FROM-THE-EDITOR

Can you imagine life without electricity? You don't have to understand exactly what it is or where it comes from to appreciate how much better it has made things. But the ways we make and move electricity have also hurt people – especially Indigenous people – as well as animals and the environment. You can help make the future brighter by learning about our power-ful history. Nancy

# SPONSORS

Funded by the Financé par le







THE PARLIAMENT BUILDINGS IN OTTAWA HAD ELECTRIC LIGHTS one year before the American Capitol Buildings.

IN 1960, NEW BRUNSWICK AND NOVA SCOTIA MADE THE FIRST INTERPROVINCIAL ELECTRICAL CONNECTION.





#### ONTARIO LAWYER FREDERICK FETHERSTONHAUGH DROVE Canada's first electric car in 1893. It could go 24 km/hr.

QUEBEC'S JAMES BAY HYDRO PROJECT OF THE 1970S AND '80S FLOODED AN AREA BIGGER THAN LEBANON OR JAMAICA AND KILLED ABOUT 10,000 CARIBOU.

CANADA'S FIRST Commercial wind farm near Pincher Creek, Alta., Started Generating Electricity in 1993.

"WE OF THE PRESENT GENERATION ARE THE FIRST TO ENJOY REAL LIBERATION FROM THE DARKNESS AND LURKING FEAR OF NIGHT." -FROM AN AD FOR THE MONTREAL COMPANY NORTHERN ELECTRIC, 1924



#### FEATURE STORY



Although everyone's life was different, in the days before reliable electricity, you would have been MUCH less comfortable and worked MUCH harder.

### Light

Before your family had electricity, you probably got up with the sun and went to bed not long after it did. You had to carry your small circle of weak candle or lamp light around with you. You might have helped make candles, or had the messy job of cleaning the kerosene lamps.





## Heat

Your house would have had one stove that burned wood or coal (or both). Some might have had a smaller second stove in another room. Few had one upstairs. The stovepipes threw off a bit of heat, but if your bedroom was upstairs, it was cold in the winter.

To help warm up a chilly bed, people would heat a stone or brick on the stove or fill a rubber bottle with hot water.

# Food

You wouldn't have had many choices (or many leftovers), since food had to be eaten before it went bad. Kids helped with the slow, hot work of preserving summer's fruit and vegetables in jars for the cold months. Your family might have used a root cellar, where things like potatoes. carrots, apples and turnips were stored in earth over the winter. Some families had an icebox to keep food cool. Crews cut big blocks of ice from frozen lakes. Icemen stored them in straw or wood shavings and sold them in chunks that lasted a few days in the icebox.

Crews cut ice near Nakina, Ont.. north of Thunder Bay. in 1935

For generations, Indigenous people have dried, smoked or frozen food so they didn't need refrigeration. At right, an Inuit woman sets out fish to dry, 1951.





# Mannville, Alta., 1949.

# Water

Whether you lived in the country or the city, your toilet was outside. (If you've used an outhouse in a park in the summer, just imagine doing it in January!) You might have had a chamber pot under your bed for doing your business — emptying it in the morning was also your job. You likely would have had a bath once a week, using water heated on the cook stove and shared by the whole family in turn.

### **Risky Times**

Candles and old-fashioned lamps look pretty, but if you dropped or forgot one, you could burn down a house or barn in no time. Chimnev fires were common. Spoiled food could make people terribly sick. Unclean water carried diseases. Electricity helped make life much safer.



In English, an outhouse is sometimes called the back house. That word became "bécosse." which many francophones use for the same thing.

KAYAK FEB 2024 5

#### FEATURE STORY

# POWER TO THE PEOPLE

Making electricity and moving it around is a big challenge in such a big country. The benefits and harm caused along the way haven't always been shared equally.

# WATER Shawinigan Water and Power generating station near La Gabelle, Que., late 1960s.

Tumbling, rushing water had long been used to turn wheels that ran mills for sawing lumber and grinding grain. In 1881, Canada's first hydroelectric station started generating electricity as the churning water of the Chaudière Rapids in the Ottawa River turned huge turbines. From coast to coast to coast, the race was on to harness water. The bad news: As companies and governments dammed and diverted rivers to create electricity, they often flooded huge areas, drastically changing habitats and killing fish and animals. In some places, changing the water flow or flooding traditional territories destroyed Indigenous people's homes and food sources they had long relied on, such as manoomin (wild rice) and hunting areas. The better news: Hydro power doesn't emit gases that contribute to climate change.

BIG IN: Yukon, British Columbia, Manitoba, Ontario, Quebec, Newfoundland and Labrador



Hydro is an ancient Greek word for water. People from other English-speaking countries often find it funny that when Canadians say hydro, we mean electricity. That's because so much of our power is generated from water, we've just shortened the word hydroelectricity.



Canada's first generating station at the Chaudière Falls in the Ottawa River is becoming a park, thanks to the National Capital Commission and the local Algonquin community. Although it won't be finished for a while, the park already has accessible pathways to viewing stations with an amazing view of the rushing water.



About 60 per cent of Canada's electricity omes from hydro power.



Hydro-Québec started planning huge generating stations in the James Bay region without talking to the Cree, Innu and Inuit people who had lived there for many generations. Protests eventually led to the first modern treaty, the James Bay and Northern Quebec Agreement in 1975. You can read more about it in the comic "Power of the People" in the September 2018 *Kayak* at CanadasHistory.ca/JamesBay.

# TIDES

In Annapolis Royal in 1984, Nova Scotia built Canada's only plant that generated electricity from the ocean's daily tides. Although it doesn't damage the environment as much as other methods, tidal electricity is very expensive. The Annapolis Royal Generating Station shut down in 2019. Other companies have tried to set up tidal energy plants but haven't succeeded yet.

# COAL

People in cities and places without a lot of trees had long burned coal to heat their homes and cook stoves. In the 1950s, some provinces started burning coal to generate electricity. Although coal was plentiful in several parts of Canada, mining it was dangerous: In Nova Scotia alone, nearly 2,500 died between 1839 and 1992 in coal mines. Many more miners died later from years of breathing poisonous dust. Burning coal pollutes the air, and the ash it leaves behind can contaminate soil and water.



Early on, boys as young as eight worked in Canadian coal mines. Until the early 1900s, there were no rules about how old a coal miner had to be. The boy shown above is 14. (Date and location unknown)

BIG IN: Alberta, Saskatchewan, Nova Scotia



Oil and gas are forms of petroleum, which comes from fossilized plants and trees under the ground. The Canadian oil industry started with a discovery in southwestern Ontario in 1857. Alberta produces the most petroleum products of any province. Gas was first found there near Medicine Hat in 1904.

Oil drilling operation in Alberta



# OIL AND GAS

In many parts of Canada, people's electricity comes from plants that burn diesel oil or natural gas. Getting those fuels out of the ground and processing them to be useable affects the environment. When oil and gas are burned, they pollute the air, although natural gas is cleaner.

**BIG IN:** Alberta (natural gas), Northwest Territories and Nunavut (diesel)

# NUCLEAR

Canada's first nuclear power plant started operating in Ontario in 1962. Canadian scientists developed the world-famous CANDU nuclear reactor. Although it's very expensive, this kind of power doesn't pollute the air or create greenhouse gases the way oil, gas or coal do. For a while it seemed nuclear energy would be a big part of our electrical future, but by the 1970s,



many Canadians were starting to worry it was too

dangerous. Researchers are working on something called small modular reactors that are safer but produce less energy. Nuclear power generation creates deadly radioactive material. Canada's Nuclear Waste Management Organization has the job of finding a way to deal with it safely.

**BIG IN:** Ontario, New Brunswick

At first, private companies set up and ran most of the electricity generating plants. Provincial, territorial and local governments eventually took over the business of making, moving and selling power. These governments often sold these businesses back to private companies.

A potato field and wind farm, West Cape, P.E.I.

# WIND AND SUN

These are sometimes called "renewables" because their power sources just keep producing — we don't use them up. The wind turns giant turbines to create electricity. Solar panels generate power by converting the sun's energy. Both have taken off since the 1990s but are still on the pricey side. They don't generate electricity when there's no wind or the sun isn't shining, though, so the next step is finding the best way to store power for those times.

**BIG IN:** Prince Edward Island

Inuit kids by a window, Northwest Territories, 1955.

People have used passive solar power heat and light from the sun — for centuries. They left salt water out to evaporate, dried fruit in the summer sun or put in windows to allow sunshine.

KAYAK FEB 2024

Power lines in Alberta (top) and Manitoba (right)

# POLES AND LINES

Once you've generated electricity, how do you get it to customers? The first hydro plants had to be located fairly close to the people who needed it. Companies soon started experimenting with ways to transmit electricity over longer distances. They strung long wires along rows of tall wooden poles. These power lines carried power to stations where it was reduced in strength and sent on to homes, businesses, schools and anywhere else that needed electricity.

A 27-kilometre-long power line built in 1897 from the Saint-Narcisse generating station to Trois-Rivières, Que., was the longest in the British Empire at the time. The next year, a plant on B.C.'s Kootenay River started transmitting to mines about 50 km away. Those distances continued to grow, and electricity travelled farther and farther away. Giant metal towers supported bigger and stronger lines.

Mines, paper mills, factories and other big industries were usually first in line to get electricity. Big cities generally had electric power before smaller towns and villages. People in the countryside waited longest, especially if they lived on small islands or far from bigger centres. Areas with lots of rivers that could be harnessed got electricity before places that didn't have such good ways to generate power nearby.

Most Canadians had access to electricity by the 1960s, but there are still places today that don't, whether because it's too hard to provide or because those customers would prefer to live "off the grid" (unconnected to larger power systems). And in some places, including many Indigenous communities, people would love to have reliable, clean electricity but must burn diesel oil to create power from generators.

4

Canada sells more electricity to the United States than we use here at home.

## UH-OH!

UP Imag

Canadians haven't always been able to count on a steady supply of electricity. In the early days, it flickered on and off without warning, and sometimes only ran for a few hours a day. Even now that most of us have reliable power, we know the lights can go out for all kinds of reasons. Snow and ice storms, hurricanes, heavy rain and high winds can knock out the electricity for a few minutes. a few days or sometimes a few weeks. Most Canadians know what to do: Grab candles and flashlights and be patient.

> A huge ice storm in January, 1998, left hundreds of thousands of people in eastern Ontario and southern Quebec without electricity for weeks.



#### FEATURE STORY

OFF AND

The arrival of electricity changed almost every part of life for Canadians who lived in towns and cities. Here's a look at one change that didn't last, and one that did.

Passengers board a Toronto streetcar, 1905.

#### **STREETCARS**

Between 1886 and 1920, nearly 50 Canadian communities had electric street railways. Picture a train, but much smaller, usually with just a few cars. They ran on special tracks and had cables connecting them to overhead power lines. And they weren't just for big cities, either, Cornwall and Peterborough, Ont., Sydney, N.S., Lethbridge, Alta., Moose Jaw, Sask., St. Stephen, N.B., Nelson, B.C., Trois-Rivières, Que. — you could have hopped on an electric streetcar in any of them. Well, at least until after the Second World War, when cities decided to replace their street railways with buses. and more people started driving cars. Several cities such as Vancouver, Ottawa, Calgary and Montreal have electric light rail systems that run on separate tracks, but only Toronto has kept its streetcars.



#### **STREETLIGHTS**

When Canadian cities started installing reliable electric lights along their streets in the early 1880s, people were dazzled — literally. Suddenly the night felt less dangerous. People could walk around confidently after the sun had set, now that they could see almost as well as during the day. Women in particular felt more comfortable and could leave their houses with less fear. Crime dropped because



An undated drawing of / Notre Dame Street in Montreal.

there were fewer dark spots to hide in. Just imagine walking around your city or the nearest town in the pitch black, without streetlights or friendly brightness spilling out of houses and businesses. Traffic lights were another welcome invention. The first ones in Canada went into operation in Hamilton, Ont., in 1925, and soon afterward in Toronto. They would certainly have made life easier for the police who had to try to direct horses, cars, streetcars and people walking.



#### YOUR STORY



# SAVING THE FUTURE

Canadians use *waaaay* more electricity per person than all but a few other countries — about three times as much as most Europeans! Of course, it can get very cold and very hot here, so we need to heat and cool a lot of buildings. Plus the kinds of industries we have in Canada gobble electricity for processing things like oil, wood and metals. As more people buy electric cars, the need for power is going to continue to go up and up.

# HOW CAN YOU HELP?

RIGHT IDE

When a device is charged, unplug it so it doesn't keep using even a small amount of power. You have a part to play in the story of Canada and electricity.

Ask your grown-ups to get power bars that you can turn off at night. That way, a TV or printer plugged in to the bar won't be draining electricity to keep those little lights on.

14 KAYAK FEB 2024



Harvesting manoomin (wild rice) on Rice Lake, Ont., 1921.



Library and Archives Canada, Brittany Luby



#### FOR AND FROM GENERATIONS

Brittany Luby, whose paternal ancestors come from Niisaachewan Anishinaabe Nation. is one of our advisers at Kavak. She grew up in Treaty 3 territory on Lake of the Woods in what is now known as northwestern Ontario, where her Anishinaabe relatives' lives were upended by flooding from hydroelectric dams. She shared the Anishinaabe idea of Seven Generations with us This is a way of thinking that asks whether our actions show respect for those who came before us: our parents, grandparents and greatgrandparents. It also considers how those actions will affect our present and future relations: our children, grandchildren and great-grandchildren. Keeping the past, present and future in mind helps us to make better choices because we're thinking about more than just ourselves in this moment. When it comes to how you use electricity, as Brittany says, "What kind of ancestor do you want to be?"

KAYAK FEB 2024 15



-



# **HEART OF HOME**

Written by Allyson Gulliver • Illustrated by Arden Taylor

#### ALMA, QUE., NOVEMBER, 1983

Sophie carefully measured the maple syrup and poured it into the slow cooker, mixing it with the hard little white beans. "Salt pork, beans, water, onion, powdered mustard, molasses, bay leaf, pepper — that's it!" Her mother had taught her to read the ingredient list out loud so she didn't miss anything.

"Add a wee bit of vinegar, ma belle," her grandmother suggested, looking up from her knitting. "Only if you want, though," she smiled. "You're the chef!"

"Merci, Mémère," Sophie said doubtfully. She didn't want to seem rude, so she took out the jug of vinegar but only pretended to add it to the pot. "We'll see how the baked beans turn out." As she washed her hands, she said, "Do you want to go sit in the living room?"

"Non, merci. I'm happy right here, in the kitchen."

Sophie plunked down in a chair at the table. "Why is that, Mémère? You always sit in here when you visit, even though the living room is much comfier."

"But the kitchen is . . . friendlier," her grandmother replied. She sighed. "We all used to spend so much more time together when we had the wood stove."

Memories of visiting when she was a little girl flooded into Sophie's mind — pictures of Mémère adding more wood to heat up the oven, sticking the little coil-wrapped handle in to move an element around. "Wasn't it a lot of work, though? And so hot in the summer!"

"But there was always hot water ready for tea," her grandmother said. "And it was so cozy in the winter, right Michel?"

Sophie's dad had just come back in after clearing the season's first snow from the driveway. "Sure was, maman," he said, "but not just from the fire. We spent a lot of time chopping kindling, too."

He and Sophie looked at each other with a smile, and at the same time, imitated Mémère's familiar instruction: "Don't come in unless you have an armload of wood!"

"But," Mémère said triumphantly, "the wood was free from your uncle's farm. Electricity? We have to pay for that. And sometimes — " she snapped her fingers "it went off, just like that. No lights, no heat, no warning. We never knew when or why. That doesn't happen with a wood stove!"



Sophie's dad nodded. "True. I was always a bit in awe of you and that thing. I could never figure out how to get the fire the right temperature. You were an artist with the wood stove, maman — the bread always golden, never burned."

"And you could leave beans at the right spot on the back of the stove all day and they'd be perfect for supper," Mémère added. "I'd still prefer that to electricity."

Sophie looked at her grandmother, astonished. "But it would be so dark in the winter. And no TV or stereo?"

"Electricity was good in a lot of ways, but in others, it meant a lot more work," Mémère said. "Those lights show everything — all the spiderwebs and dust. When we had lanterns or candles, we didn't worry so much about the house being spotless."

Her face grew wistful. "And the evenings — they were so nice. Everyone in the kitchen, doing homework or listening to the radio."

Sophie tried to picture her dad and his five sisters and brothers all finding space in the old kitchen along with her Mémère and Pépère Tremblay. It sounded crowded but, just like her grandma said, friendlier, too.

"I'm used to it all now," Mémère said. "It's good to be able to read as late as I want, and I do enjoy watching *La famille Plouffe*. But it would be nice to have a place to dry wet mittens and socks, or keep the kettle hot, without having to pay extra."

Sophie's dad winked at her, then turned to his mother. "Here's an idea, I think your electric stove is here to stay. But what if we got you a little wood stove for your living room? Then you could watch TV or read while your socks dry and your water heats up for

tea. I'd even chop the kindling."

Mémère's face lit up. "Oh Michel! That would be wonderful!" She turned to Sophie. "You can come over to do your homework in the evenings as often as you want. I'll even make you baked beans . . . with vinegar!" K

he people in this story aren't real, but a lot of what Sophie's mémère (French for grandma) describes was true for women throughout Canada, Wood-fuelled cook stoves needed a lot of work and attention, but they also did a lot. Besides providing cooking space, they could keep water hot all day, heat up the room and dry damp laundry, all without costing money. (Although of course it takes many hours of work to chop and stack all that wood.) The mother of a family was usually in charge of the



it do what she wanted, which was not easy.

Just like in this story, families spent many chilly evenings together in the kitchen, which was always the coziest room in the house. Electric lights and heat made it possible for people to be in different rooms doing different things, which changed family life. (It's a bit like streaming video. Families used to all watch shows together on their one TV, but if they have good internet service, now everyone can be in separate places watching whatever they want.) The town of Alma actually had electricity fairly early on. (Four villages joined to form the town in 1962.) The huge Isle-Maligne hydro station was built on a nearby river in 1926. It provided power for an aluminum factory and a paper mill. As the province quickly increased its ability to generate electricity, several smaller Quebec communities became responsible for distributing power. Most eventually became part of Hydro-Québec, but about 10 still exist throughout the province, including in the Alma area of the Saguenay-Lac Saint-Jean region.



# MANITOBA TRANSFARMATION













**BACKYARD HISTORY** 



Power up your electricity smarts at these energizing places.

#### LA CITÉ DE L'ÉNERGIE

Open from early June until late September, this museum in Shawinigan, Que., explores the history of the community and its industries. It also has a whole big section devoted to hydroelectricity and power generation in the province.



#### MANITOBA ELECTRICAL MUSEUM AND EDUCATION CENTRE

Check out how appliances evolved with electricity and learn how to be safe around power at this Winnipeg museum. You can also discover the real story behind this issue's comic about farm electrification in Manitoba.

#### **SCIENCE CENTRES**

From Kamloops to Fredericton, Regina to Montreal, most biggish Canadian cities have a museum devoted to science, each of which usually has a section that's all about electricity. Bonus: They also have lots of games and other fun ways to learn about all kinds of other science stuff, too.

Saskatchewan Science Centre



IN 1883, THE WEAVE SHED AT THE CANADA MILL, A COTTON FACTORY IN CORNWALL, ONT., WAS THE FIRST INDUSTRIAL BUILDING IN CANADA TO BE LIT WITH ELECTRICITY. THOMAS EDISON HIMSELF FLIPPED THE SWITCH. THE MILL NOW HOUSES BUSINESSES AND APARTMENTS.

THE TUNNE

#### **GENERATING INTEREST**

All over Canada, you'll find national historic sites and plaques marking places where electricity has been generated. Just north of Mission, B.C., is the Stave Falls Hydro-Electric Installation, completed in 1912. The enormous generating station at the Carillon Canal National Historic Site west of Montreal was the first to be built under French-Canadian engineers and is the biggest on the Ottawa River. And if you're visiting Niagara Falls, don't miss the new Niagara Parks Power Station. Take the glass elevator, walk the tunnel (shown above) for a breathtaking view, and tour the first major power plant on the Canadian side of the river, created by the legendary Nikola Tesla (shown at right).



KAYAK FEB 2024 27

GAME





28 KAYAK FEB 2024



Answers on p. 30.

KAYAK FEB 2024 29

# ANSWERS





#### **HIDDEN PICTURES P. 29**



# **TEACHER'S CORNER**

You can find classroom material in both French and English to go with this issue of *Kayak*. Just visit *CanadasHistory.ca/electrification* or *HistoireCanada.ca/electricite*.







#### Choose one way that electrification greatly changed life in Canada.

Search for images and photographs that showcase how things appeared before and after the arrival of electricity. Make a collage using these visuals to show how electricity transformed that part of life. Add labels or captions to help explain the scenes. Submit your collage to CanadasHistory.ca/power and you could win a free one-year subscription to Kayak!



KavakMag.ca

Editor Nancy Payne Art Director James Gillespie **Designer** Leigh McKenzie Digital Media Director Tanja Hütter Programs Director Joanna Dawson **Program Coordinator Community and Outreach** Jean-Philippe Proulx Program Coordinator Youth and Education Brooke Campbell Historical Advisers Catherine Carstairs, Brittany Luby, Laura Madokoro

Fact Checker Nelle Oosterom

Special Thanks Rebecca Dolgoy, Ruth Sandwell



CanadasHistory.ca

#### President & CEO Melony Ward

**Circulation and Marketing Manager Danielle Chartier** 

Finance & Administration Director Patricia Gerow

Administrative Assistant Belle Lau

Founding Publisher Deborah Morrison



FSC<sup>e</sup> C011825

KAYAK: Canada's History Magazine for Kids (ISSN 1712-3984) is published four times a year by Canada's National History Society Bryce Hall, Main Floor, 515 Portage Ave, Winnipeg, MB, R3B 2E9

Phone: (204) 988-9300 Fax: (204) 988-9309 Email: info@KayakMag.ca

Canada's History Society is a charitable organization founded in 1994 to popularize Canadian history. Charitable Reg. No. 13868 1408 RR0001 Learn more at CanadasHistory.ca/support

Website: KayakMag.ca

Copyright ©2024 by Canada's History Society All rights reserved. Reproduction without permission from the publisher is strictly forbidden.

Member Services Kayak Magazine, PO Box 699 Stn Main, Alliston, ON, L9R 1V9

Phone: 1-888-816-0997 Email: members@KayakMag.ca

One-year subscription price (4 issues): Canada \$16.95 (plus tax). Please add \$5.00 for U.S. orders and \$8.00 for international orders. Single copy price: \$5.00. GST Registration Number 13868 1408 RT

PUBLICATIONS MAIL AGREEMENT NO. 40063001



Printed in Canada



# Oshki Wupoowane The Blanket Fund

The HBC Point Blanket has been called many things throughout its history: an essential trade item, an enduring emblem of Canada, a carrier of disease, and a symbol of colonialism. We begin to unpack and acknowledge the many layers of symbolism the blanket embodies in history, art, pop culture, and commerce.

Moving forward, 100% of net proceeds of all Point Blanket sales will go to Indigenous Peoples. Hudson's Bay Foundation and the Gord Downie & Chanie Wenjack Fund have partnered to launch **Oshki Wupoowane | The Blanket Fund.** 





To learn more, visit thebay.com.



