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An immigrant experience
Telling the Immigrant Story

The last “immigration shed” in Canada, Halifax’s Pier 21 is now an interactive facility honouring the immigrant experience

BY ALLAN LYNCH

A stony landscape, made grey and grim by rain, greeted John Ceece, a 16-year-old Irish lad, when he arrived alone and all but destitute in Canada in November 1929. With only $2 to his name, he was shunted from the boat into Pier 21, Halifax’s new immigration facility. It was here, on a rough wooden bench in a cold shed, that the homesick young immigrant spent his first night in Canada.

In the 1920s, Canada needed immigrants to help farm the land. Advertisements for farm workers were placed in Britain. Ceece, who’d worked on a small farm on the outskirts of Belfast for six months, came across one of these and, having heard of the “rich life in Canada,” decided to sign on. In his excitement, he didn’t take much notice of the fact that he was making a commitment to do farm labour for three years. Had he known how unpleasant his life would be as a farm hand, he might not have pursued the opportunity. The food was bad, the isolation was unbearable, and his employers cheated him on wages. Six months of farm work was enough for Ceece, but not meeting his three-year commitment meant risking deportation. At this point he felt it was a risk worth taking.

Ceece made his escape by riding the rails to Montreal – he knew he had two half-brothers in or near the city, although he had no address for them and no idea how to find them. Whipped by wind, rain and swirling smoke from the engine, he spent days riding on the roofs of boxcars. In spite of the economic hardship of the time, strangers offered him food and places to sleep. One family gave him a new pair of shoes, and a CN engineer actually slowed the train down so he could jump aboard.

Unable to find his brothers in Montreal, Ceece decided to set off on foot for New York, where he had an aunt. Not far from Montreal, however, he met a kindly farmer who decided to stay with him for a while, working for room and board. The farmer let
After the war, Pier 21 welcomed thousands of returning Canadian soldiers, such as those who arrived on the *Ile de France* on July 14, 1945.

space to campers and one day, while chatting with one of them, happened to mention the story of his new Irish worker. On finding out the worker’s name was Cree, the camper commented that he knew a man named Sam Cree in Kelowna. Yes, a small town near Montreal. The farmer got in touch with the man, found he was indeed John Cree’s half-brother, and invited him to visit. The next day, Sam arrived, to the surprise and delight of his young half-brother.

John went to live with Sam, who got him a job at C.I.L., the chemical company where he was employed. John was to work for C.I.L. for 38 years, until retiring to Dartmouth, N.S., in 1968.

John Cree’s story of courage, tenacity and a desire to survive is one of many such stories told at the newly renovated Pier 21, which opened in 1989 as an interactive facility that recounts the stories of the 1.5 million immigrants, refugees, child evacuees, war brides, defecters and returning members of the armed forces who passed through Pier 21 from 1928 until 1971. Canada’s Ellis Island, it had accommodation for 400 people, reception areas, a hospital, dining room, kitchen and cannon, baggage and storage areas and even a jail. Ships arrived at Halifax daily (sometimes as many as five would arrive in a single day), at all hours, discharging hundreds of tired people escaping war, persecution or economic hardship.

In her office at Pier 21, Carole Ann Smith, director of research and information services, talks about Canada’s immigration history and the role Pier 21 played in it. “Immigration is a key element of Canada’s history,” she explains. “It helped build and define our country.”

In the 1920s, when Canada was desperate for farmers to work the land, it encouraged immigration by offering bond deals and by advertising for farmers and farm hands in both Britain and the United States. British immigration was encouraged, she notes, because it appealed to Canadian policy makers who wanted to strengthen our ties to the British Empire. During the 1930s, however, with the Depression having taken hold, immigration dropped, with only a third of applicants gaining admittance.

The Department of National Defence took over Pier 21 as soon as the Second World War began. Immigration virtually ceased, but Pier 21 continued to be a busy place, seeing almost half a million Canadian service personnel set off for Europe and witnessing the arrival of numerous child evacuees from Britain as well as prisoners of war.

But Pier 21 was to see its busiest days after the war, explains Smith. Pier became the returning service men and women, then 45,000 war brides and their 22,000 children. The Department of National Defence oversaw these arrivals, remaining at Pier 21 until immigration staff took over in 1947. Between then, the huge postwar wave of refugees had started to arrive from Europe – in all, 100,000 would come to Canada during the late 1940s and ’50s. They were followed by a wave of European immigrants seeking a fresh start in Canada.

“By the late 1960s, the majority of immigrants were choosing air travel over multi-day Atlantic ship crossings, which would lead to the closing of Pier 21,” says Smith. Canada’s last “immigration shed” was to welcome its final immigrant ship on March 20, 1971.

It was the end of an era.

In 1993, a group of Haligonians, prompted by a desire to keep alive the stories of their city’s immigration shed, formed the Pier 21 Society to establish a permanent memorial honouring the immigrant experience. The society’s past president, Ruth Goldblum, says the group felt there was something sitting on the Halifax waterfront that was vitally important to the history of Canada but that would just disappear if nothing was done. “We wanted our great-grandchildren to know what it was like to arrive in a new country without anything,” she explains. “We wanted them to understand the courage it took and to realize that these stories haven’t ended – people are still making their lives to come here, travelling in dreadful conditions, knowing there’s only a slim hope that they’ll be able to make it here. We are a country of immigrants, and we should all take pride in that.”

It took six years, a spectacular fund-raising effort and $9 million to make the dream a reality. When the newly renovated Pier 21 opened on Canada Day, 1999, behind-the-scenes organizers thought they were being optimistic in projecting that 2,000 people would visit the interactive facility that inaugural day – in fact, 9,000 came.

The day began with an eerie quiet as people of all colours and backgrounds gathered at Pier 21. A pipe in tan, tuxedo played while the visitors took their places for the opening ceremony. Former war brides arrived on board the HMCS Preserver. Members of the Royal Canadian Legion proudly bore flags. Mounties came in their scarlet uniforms. Everyone seemed to have a connection to Pier 21. Some were immigrants who had been accepted into Canada here; others, the sons and daughters, nieces, nephews and grandchildren of immigrants.

Mark Kazimierski, a physican from Winookiet, N.S., was among those attending the ceremony. He had arrived in Halifax in 1948 at the age of three with his mother, father and baby brother. Polish Jews, they were the only people left from their 86-member extended family – the rest had died in the Holocaust. Ann Kazimierski, Mark’s mother, who now lives in Montreal, still cries when she recalls the family’s arrival. “It meant we were safe and free,” she says. “I remember hundreds of people getting off the ship and lying down to kiss the ground in Halifax. There was a sign that said Welcome to Canada. It brought tears to our eyes.”

Ann also recalls the stranger who was so kind to her at Pier 21. “She gave me a loaf of bread and a bun for cake that she’d baked herself. She didn’t know me, but she hugged and kissed me. She was the kindest person I’d ever met.”

The woman was Stuie Finfrock, who was the Florence Nightingale of Pier 21. For more than 30 years, Finfrock brought bread and cakes, sandwiches and compassion to people who had experienced inhuman horrors.

Life in Canada was by no means easy for the Kazimierski. While Canada provided safety and freedom, it demanded a lot in return. A dentist in Poland, Henry Kazimierski, Mark’s father, wasn’t allowed to go
into practice on his own in Canada until he qualified here. The family moved to Montreal, where Ann scrubbed floors for eight months until Henry secured work as a dentist in a hospital clinic. The Karinskas eventually moved to St. Agatha, Que., where they lived until Henry died in 1976.

At Pier 21 today, visitors can hear immigrants tell their own stories. A mask train takes people on a typical immigrant journey — landscape whizzes by windows, the floor vibrates, and in the sleeping compartments, video recordings recall the journeys people made to get to and across this country.

The facility also has an extensive data base on immigrants and all the ships that carried them to Halifax.

One of the most poignant displays is a small suitcase and pile of belongings: three books, a pair of blue jeans, a doll, some silverware, a candlestick, a silver plate, a framed photograph, a wooden jewellery box and some bedding. Visitors are invited to pack the suitcase. Even these few objects take up more space than the suitcase offers, and a choice must be made.

Mariana Lazar (née Gray) of Dunrovin, N.S., was 11 years old in July 1940 when she was among the first boatload of child evacuees from Britain. Marianne and her brothers, Stanley, 12, and Ronald, seven, each carried one small suitcase, a little knapsack and a gas mask for a trip that was to last five years. "Our parents were given a list of what you could take — two pairs of underwear, two pairs of socks, etc. — it was ridiculous really."

Three thousand children were evacuated from Britain to Canada during the Second World War. Marianne and her brothers were among the fortunate ones. Another ship of evacuees was torpedoed and destroyed.

Ruby Gray of Susses, N.B., arrived as a war bride on June 18, 1945. Although she knew nothing about the land to which she was coming, she was neither homesick nor fearful. "No, no, I was in love," she laughs. "Who thinks about the future that much when they're in love? You just know that you want to spend it together."

To Gray, Canada seemed like the land of plenty after years of rationing. "There was so much food. I gained 10 pounds the first month I was here. There had been a bit of rationing here, but very little compared with in Britain. There'd been very few eggs at home, so I had eggs every morning for my breakfast, and fruit."

On visiting Pier 21, one cannot help but be impressed with the fortitude of many immigrant families, who often endured considerable hardship here before finding success. In 1953, Paul Sandor employed 15 men at a garage he owned in a suburb of Copenhagen. He and his wife, Edith, and their 13-year-old son, Finn, were living comfortably, but he lost his job. While on the street, a stranger helped him and asked if he needed work. "The man helped me, and I got a job."

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Now a volunteer in the Pier 21 offices, Ferguson says the place makes her feel proud to have been an immigrant. "When you first arrive, people sometimes look a little down on you. Now, with all this fuss about Pier 21, if you were an immigrant, they look up to you."

Pier 21 has always relied on volunteers to aid immigrants and make them feel welcome. Sister Salvation Liota of the Sisters of Service, who worked there from 1955 to 1959, interpreting and helping new arrivals get through the immigration process, also attended the Canadian Day opening. She typically used to work 10 to 12 hours a day at Pier 21, but sometimes as many as 22, sleeping between ship arrivals on bunks in a storage room. "On the day Pier 21 reopened, I went to the old baggage room and was overcome with emotion," she says. "In my mind, I could see all the baggage, the people flying around. In the winter we froze because the doors would be open to bring the baggage in and the wind would blow out the doors."

Sister Liota particularly recalls the Hungarian refugees of the 1950s. "The Hungarians came wearing army clothes — even the women wore cast-off army jackets and coats. Very few had a suitcase.

So all the church organizations had a big meeting and decided which was going to give what. The Salvation Army gave them food, for example, and we gave each child a new toy. Others gave shoes and clothes." However, not all of Sister Liota’s memories are sad. She chuckles at the recollection of teaching Hungarian refugees to play bingo and of dances her order held in the nearby boathouse. The sisters would replay the record player at midnight, she laughs, and the Hungarians would plug it back in.

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The Van Helverts arrived in Canada on May 14, 1950. They were among the many Dutch farming families to immigrate to Canada in the 1950s.
Future Motoring

What will the car of tomorrow be like?
A number of options might well be available to us, including the electric fuel-cell vehicle

BY RUSSELL FELTON

I had never thought of New Jersey as one of the more scenic American states, but on an afternoon in early fall, a scenic 40 minutes by freeway west of Newark airport, I found myself in forested hill country as pleasant as any I had seen in my life. The forests were lush, the farms and townships ordered and prosperous-looking, and twice I saw small herds of deer grazing by the roadside.

The next morning, as I turned into the spacious and immaculately kept grounds of a complex of low-rise buildings in Clinton Township, N.J., I might have been entering a rural estate in England. This pastoral site was, however, the headquarters of ExxonMobil Research and Engineering Company (EMRE), a subsidiary of Exxon Mobil Corporation, the world’s largest integrated oil company and the majority shareholder of Imperial Oil. The affiliation allows Imperial to...
benefit from all research carried out by EMRE. The value of this is enormous, for the research focuses on a variety of areas critical to our lives, from improvements to fuels, lubricants and refining processes to advanced "pure" research into future energy sources and how they might be used.

The question that led me to the EMRE laboratory was one that intrigues many of us as we move into a new century: what will the cars of the future be like? More specifically, what kind of engine and from what fuel or other energy source will derive its motive power?

Since the first "motor car" was built by the German inventor Karl Benz in 1885, automobiles have been powered almost exclusively by the internal-combustion engine. A vaporized fuel is injected into a cylinder, compressed by a piston and ignited by an electric spark. The resulting explosion drives the piston down the cylinder and rotates a crankshaft, which then turns over the engine during the piston's downstroke and compresses on the upstroke, and the cycle is repeated.

From its inception, the fuel for the internal-combustion engine in automobiles has almost exclusively been either gasoline or its first cousin, diesel fuel. Is that situation changing? As we move into the 21st century, will the traditional gasoline-fueled internal-combustion engine be replaced by a significant degree? As governments, motivated by environmental concerns, seek increasingly stringent regulations regarding emissions, automobile manufacturers around the world are striving to design vehicles that use dramatically less gasoline or diesel fuel than the conventional engine, or none at all.

It might surprise some to know that helping automakers find ways of powering vehicles with fewer emissions but without sacrificing efficiency is a major goal of EMRE researchers, my host Gilbert (Gib) Jersey tells me in his office at the Clinton facility. The soft-spoken Jersey, who earned a master's degree in meteorology, is a member of EMRE's strategic planning group, which tries to foresee future energy and technology needs and how they might be met. He is quick to point out that gasoline because the dominant transportation fuel for sound reasons: "Gasoline is plentiful, readily available, relatively cheap, easy to transport and store, and safe compared with other liquid fuels and gases. It does not require pressurization or otherwise special containers or tanks, evaporates quickly when spilled, is easily detectable by its odor, doesn't dissolve readily in water or corrode metals." But most of all, he says, gasoline is a highly efficient fuel, containing more energy by volume than the alternatives (40 percent more than ethanol, for example), which translates into fuel economy for the consumer.

"To overtake gasoline on a large scale," Jersey adds, "an alternative fuel would need to match most, if not all, of these properties while remaining economically attractive. That's a tall order, especially since gasoline is constantly being reformed to reduce emissions. Engine, unvented and articulated, Jack Johnston, who holds a PhD in polymer science, and is head of advanced fuels and engine research at EMRE, agrees that it would be premature to write off the gasoline-powered internal-combustion engine just yet. "Refinements to conventional engines and fuels, along with improvements to pollution control technologies in automobiles, have dramatically improved both fuel economy and exhaust emissions over the last 20 years or so, to the point where a new car today produces about one percent of the emissions per kilometre driven that a new car of the mid-1970s did," says Johnston. "And there's considerable more improvement possible with conventional engines." So-called "hybrid" or "dual-drive" power systems, now available in two vehicles being sold in Canada and the United States, represent a significant breakthrough, Johnston tells me. The hybrid car utilizes two power sources, a small internal-combustion engine and a battery. The wheels are driven by an electric motor or, in some cases, by both, with a computerized controller choosing which method will be used at a particular moment. At low speeds, the hybrid's battery is the primary source of power (the engine drives a generator to keep the battery charged). When extra power is needed, for acceleration or heavy loads, the computer diverts power from the engine to help drive the wheels. As a final touch, the system also captures kinetic energy generated during braking to recharge the battery.

"Hybrid vehicles," says Johnston, "dramatically increase fuel efficiency and reduce emissions, with no loss of performance or driving range. The two models currently available in the hybrid system are the compact Honda Insight and the four-door Toyota Prius sedan. In the city, the Toyota Prius achieves 67 kilometers per 4.5 liters, making it up to twice as efficient as similar-sized conventional vehicles - with only about 10 percent of the tailpipe emissions." As for drivability, Johnston says the Toyota Prius, and its performance is comparable to a conventional car. The only difference is that when it's running on the electric motor or at a stop, it's very quiet.

On a tour of the EMRE laboratories (rooms packed almost to overflowing with apparatus, control panels and monitoring screens for tracking, in millions of seconds, how fuels flow, ignite and release their energy), Johnston describes another advantage of the potential for significantly increasing fuel economy and thereby reducing overall emissions: "direct injection," which is essentially a new way of mixing air with gasoline or diesel fuel vapor in an internal-combustion engine.

"Traditionally," Johnston says, "air and gasoline have been mixed in a carburetor or intake system to produce a fine mist that's inducted into the combustion chamber just before ignition. Using a high-pressure injector, the new system injects fuel directly into the combustion chamber, where it mixes with air drawn in through the intake ports. This results in the ability to use a leaner [low fuel, more air] mixture that, when combined with a specially designed piston and combustion chambers, can generate the power of a traditional system while burning 10 to 15 percent less fuel.

Direct injection vehicles have been widely marketed in Japan and Europe, and in the United States a joint partnership of automakers and the federal government has identified direct injection as the leading engine technology for use in high-efficiency hybrid vehicle designs.

The technology that has most captivated the attention of environmentalists, the media, governments and the public alike, however, is the so-called electric fuel cell vehicle, which holds the promise of zero-emitting automobiles.

The fuel-cell vehicle is an electric car with a difference. In the past, attempts to build electric cars have foundered when confronted with the problem of how to generate and store sufficient electricity within the vehicle to provide an acceptable combination of power, performance and driving range. On-board batteries need frequent recharging, which not only is inconvenient to the motorists but also requires considerable electric power. Since the electrical utility may burn natural gas, oil or even coal, the environmental benefits of the zero-emitting vehicle may be negated. Moreover, battery performance is strongly diminished by cold conditions, a major drawback for Canadians.

The advantage of fuel-cell technology is that it does not require special batteries to store electricity. Instead, it generates an electrical current directly through an electrolytic process that uses hydrogen as a fuel. Explains Johnston: "Fuel-cell technology uses a chemical reaction to separate hydrogen atoms into protons and electrons. The protons pass through a membrane while the electrons generate an electrical current that drives a motor. The electrons then recombine with hydrogen ions and oxygen in the air to form water, which is the only emission from the process."

Fuel cells are not exactly new technology - they have been used in spacecraft since the 1960s, but their use in automobiles was jammed by their size and weight and the
fact that the chemical reaction requires the use of platinum, a precious metal, as a catalyst. As recently as the early 1990s, a stack of fuel cells that could generate enough power to drive a car would have taken up as much space as a microwave and would have required 50,000 U.S. dollars worth of platinum to function. For these reasons, early fuel-cell powered vehicles were big, heavy, and cumbersome.

Today, as a result of refinements introduced by Vancouver-based Ballard Power Systems, a stack of fuel cells can be accommodated in a normal-sized passenger car and requires only about $150,000 (U.S.) worth of platinum. Consequently, a number of auto manufacturers have built prototypes and say they will market fuel-cell cars by 2005. In fact, according to Exxomobil sources, auto manufacturers representing more than 55 percent of current vehicle sales have active programs to develop and market fuel-cell vehicles.

That is not to say that fuel-cell powered vehicles will soon be crowding conventional automobiles out of car dealer showrooms and off the roads. Some significant challenges remain before this much heralded "car of the future" becomes the car of today.

One, Jersey tells me, is cost. "Although the cost of manufacturing fuel-cell engines has come down dramatically in recent years, they still cost about 10 times as much to make as conventional, internal-combustion engines," he says. "We believe that fuel-cell technologies will evolve and eventually become commercially significant for vehicle power trains despite their inherent efficiency and environmental benefits, but it will take some time."

A more complex challenge for automakers and petroleum companies, Jersey says, is deciding where the hydrogen that fuel cells need -- in the huge volumes that will be required if fuel-cell vehicles are to supplant traditional, gasoline-powered automobiles to any significant degree -- will come from. "Finding the right source of hydrogen for fuel-cell vehicles," he says, "will likely be the most critical factor in determining the success of these vehicles in the marketplace."

This requires some explanation. Fuel cells run on hydrogen and emit only water vapor. Although hydrogen is one of the most plentiful elements on earth, it occurs only in combination with another element, notably with oxygen in water and with carbon in many hydrocarbon compounds, including gasoline, natural gas, methanol and ethanol. As Professor Jim Wallace, chair of the department of mechanical and industrial engineering at the University of Toronto, explains, "To be used in a fuel cell, hydrogen must first be separated from the other elements it's bonded with in nature. That could be difficult and expensive to do on a large scale.""One option is to "crack" hydrogen from water using electricity, but this is a relatively inefficient and energy-intensive process. A more practical and cost-effective alternative is to extract hydrogen from one of the readily available hydrocarbons -- probably natural gas, gasoline or methanol -- through a process used in petroleum refining known as "refining." Yet this, in turn, raises another question of whether to extract hydrogen somewhere in the supply system so that the vehicle carries pure hydrogen, or build a small "refiner" into the vehicle itself. In the latter case, drivers would simply fill the fuel tank and drive away, as they do today.

Johnston and his colleagues at BMR believe that on-board reforming is the safer and most practical option. "Pure hydrogen, whether in liquid or compressed-gas form, is highly volatile -- in fact, explosive," Johnston says. "The less it has to be handled and stored, the lower the risk of explosion. Generating the hydrogen as you need it significantly decreases the risk."

Moreover, the cost of building networks of facilities to transport, store and dispense pure hydrogen would be enormous. Studies by the U.S. Department of Energy and consultants Arthur D. Little estimate that infrastructure to produce and distribute enough hydrogen to meet just 10 percent of today's U.S. road fuel consumption would cost about $10 billion (U.S.).

Using gasoline as the primary source of hydrogen would appear to make the most economic and practical sense. First, the age-old advantages of gasoline -- plentiful supply, relatively low price, ease and safety of handling and high energy density -- continue to apply. And second, a highly efficient production and distribution infrastructure is already in place around the world.

The major alternatives, natural gas and methanol, each come with built-in disadvantages as potential sources of hydrogen on a large scale. Natural gas would require enormous investments in pipelines, storage facilities and compression equipment, while the need for compressed gas storage in the vehicle would also present safety issues. Methanol, a liquid fuel generally derived from natural gas, is more expensive to produce than gasoline and would also require dedicated new networks of distribution facilities, including pipelines, ships, barges, storage tanks and dispensers. The American Petroleum Institute estimates that such infrastructure could cost from $15 billion to $23 billion (U.S.) for each million barrels a day of methanol production -- costs that would have to be passed on to consumers. In addition, methanol tends to corrode metal, burns with a near-invisible flame, and, since it dissolves in water, presents special environmental challenges if spilled.

The essential requirement for using gasoline in fuel-cell vehicles is, of course, a reliable, economical and lightweight on-board reformer, and it's this challenge that Johnston and his research team at BMR have tackled head on. In collaboration with automotive researchers at General Motors Corporation and Toyota Motor Corporation, the BMR team is working to design and build an on-board reformer that, combined with the fuel cell, will take about the same amount of space as a conventional engine. The reforming of hydrogen from gasoline, emits only water and carbon dioxide, and, according to Johnston, is more than twice as fuel efficient as a conventional automobile engine. In August 2000, General Motors vice-chairman, Harry J. Pearce announced that his company plans a vehicle demonstration using the new technology within 18 months, and said that it could be producing gasoline reforming fuel-cell vehicles on a commercial scale within this decade.

In the testing facility at EUR's headquarters in Clinton, Johnston takes me into a small laboratory. It is crammed to capacity with electronic and other scientific equipment -- pipes, wires, dial, valves, monitoring screens and so on. At the epicentre, so to speak, is a metal cylinder wrapped in insulation that has the size of a large Thermos flask. This is the hydrogen-extracting gasoline reformer -- in effect a "minireformer" -- that may be the final, critical piece of technology that will make the fuel-cell vehicle an everyday reality.

It may at first seem self-defeating that the world's biggest oil company would develop technology that could dramatically reduce the amount of gasoline needed to move the family automobile from one place to another, and might ultimately render the gasoline-powered internal-combustion engine obsolete, but at second glance it is not so.

"We see engine and fuel technologies constantly evolving in what you might call an energy-transporation continuum," says Jersey. "We expect simultaneous development of fuel cells, internal combustion engines, in conventional engines, in hybrid power systems and in other areas such as using composite materials for lighter, more fuel efficient cars. Some of these technologies will be in competition with one another; others will be complementary. And, ultimately, the key choices will be made by the motoring public, who will closely expect a combination of vehicle performance, fuel economy and lower emissions, all at an affordable price. We see ourselves as in the energy business, and we're determined to meet the soaring public's energy needs, however they may evolve."

Professor Wallace foresees a transportation marketplace that will cater to a variety of needs with a variety of solutions, rather than one that is essentially homogeneous, with one form of technology dominating. "With so many parallel developments going on at the same time, I don't think there will necessarily be one winner," he says. "I think we'll see different power sources matched to different transport applications or sectors, just as different airplanes use different engines and fuels today, and large vehicle fleets may run on fuel cells with tanks of pure hydrogen derived from water and distributed from large, central fueling stations, which some of the larger fuel-cell automotives, we may see different engine types and technologies, with different fuels, meeting different needs. For example, we see the possibility of hybrid urban commuting, and large and conventional cars running on reformed gasoline or diesel fuel for longer touring and so on."

In short, in the eyes of the motoring consumer, the key choice for the motoring consumer will mean improved fuel economy and a cleaner environment for all of us.
three decades. "We estimate she has saved the lives of up to 50,000 children," says Brian Davies, a senior vice-president at the Royal Bank.

For Segal-Bronstein, working with children has been a long vocation. As a teenager, she ran an impromptu kids' camp at her parents' home in Val Mortin, Que., and later served as a paediatric volunteer at two Montreal hospitals. At the age of 18, she married her high school sweetheart, Herb Bronstein, and within four years gave birth to three children.

In the late 1960s, as the Vietnam War escalated, Segal-Bronstein began to read about South Vietnam's young outcasts, Amerasian children fathered by U.S. soldiers. The more she learned of them, the more she felt compelled to do something to help them. And so, in 1969, she and two other Montreal women, Sandra Simpson and Bonnie Cappuccino, formed Families for Children, a charitable organization with a dual purpose: to find families in North America to adopt abandoned Vietnamese children and to raise money and collect used equipment for orphanages in South Vietnam. Says Segal-Bronstein: "It was a lot easier in those days to raise not only money and supplies but also awareness and interest."

Segal-Bronstein made a series of trips to Saigon during the 1970s. Staying for three to four weeks at a time, she worked at an orphanage and did paperwork for children being adopted. Soon, she applied to adopt children herself, and after 18 months of red tape, she was able to adopt two Vietnamese orphans, Tom-Lien and Tran, who were both two.

In 1972, Segal-Bronstein visited Cambodia and discovered that "the secret war" there had created the need for a similar project. Each day she was there, she and a colleague roamed Phnom Penh, rescuingorphans from the streets.

On one occasion, a bomb exploded less than three metres from the car Segal-Bronstein was driving, leaving a crater in the road. "I'd had the silly notion that if you were there to do something good, then people would know you weren't involved in the politics and no one would bother you," she recalls.

Segal-Bronstein managed to escape to Vietnam with the orphans before Pol Pot and the Khmer Rouge seized power in 1975. Within two weeks of her escape, she had helped arrange for orphaned Vietnamese children to be airlifted from Saigon to the United States. Originally scheduled to fly out with them, she opted to go on a flight a Canadian government official had arranged for her and the Cambodian children — it meant there'd be more room for Vietnamese orphans on the evacuation flight. Sadly, the plane carrying these orphans crashed, and many of the children and their adult escorts were killed.

In 1976, Segal-Bronstein moved, with her husband and 12 children (seven of whom are adopted from countries around the world), to Guatemala, where that year she established Casa Canada, a medical clinic and orphanage, and, in 1979, Healing the Children, a program created to bring seriously ill children from Guatemala to hospitals in North America for medical treatment.

The family returned to Canada in 1981; Healing the Children not only continued in Guatemala but expanded to countries around the world.

The peripatetic Canadian returned to Cambodia in 1989, re-establishing an orphanage called Canada House, which had closed when the Khmer Rouge had taken over Phnom Penh 14 years before. In 1992, Segal-Bronstein was mugged on the streets of Phnom Penh and sustained severe injuries. She returned to this country to recuperate, but Canada House continued to flourish until 1997, by which time all of its children had been placed with families in Cambodia and abroad.

That year, Segal-Bronstein launched the charity Canadians Care Children's International Foundation, whose purpose is to help children in need, such as victims of land mines or hurricanes.

On one occasion, a bomb exploded less than three metres from the car Segal-Bronstein was driving.

Last October, she worked with public schools near her home in Val Mortin to provide cloth bags filled with school supplies to children in a Guatemalan settlement. For people who had been displaced by Hurricane Mitch two years before. The children who received the kits were fascinated by the accompanying letters and pictures from the Canadian children. This sparked the idea for Around the World Kid 2 Kid, a project that would see young people from both developed and developing countries writing to children who are living through natural disasters and wars. And in November, a small (pediatric hospital) Segal-Bronstein helped to open, opened in a former boarding house in Guatemala City. Currently, she is working on a project to acquire old North American school buses and convert them into mobile medical clinics that will provide immunization and other basic health-care services in rural Guatemala.

For Naomi Segal-Bronstein, children in need are the cause of a lifetime. - Sheldon Gordon
Harbingers of Spring

Seeking signs of spring helps sustain us through the long, cold winter

BY WYNNE THOMAS

I

have it on good authority that we're going to enjoy a mild and early spring in eastern Ontario this year. My source is a former neighbour, who remarked to me the other day that a heavy snowfall before Christmas (and we certainly had that this winter in our part of the world) portends a balmy March and April. On the other hand, a bird-watcher friend of mine says that the fact that the geese were so late flying south in the fall (also true -- we had a flock of around 50 at our place up until mid-December) means that we are in for a cold and protracted winter.

To be honest, I think spring in Canada is the most maddening of seasons. It can arrive well ahead of its appointed time or it can skulk around for the best part of a month before presenting itself. It can, quite literally, be over in a week or it can linger far into what we would normally regard as early summer.

It was different when I was a boy growing up in Wales. Spring in those faraway days was a season a body could rely on. It started, by general consent, not by official decree, on March 1. St. David's Day, named for the patron saint of Wales. Every self-respecting druid -- the national flower of Wales -- knew that it was expected to be in full bloom for the occasion, and in most gardens they grew in profusion. The weather was usually mild, the hedges were already in bud, the hawthorn trees were preparing to burst into bloom and lambs gambolled in the fields.

I recall St. David's Day as being one of the very few dates on the school calendar when discipline was relaxed. In the morning, the school choir would assemble for a concert of Welsh songs, followed, of course, by the Welsh national anthem. There may have been the odd lesson or two, but by noon an official holiday had been declared and we went home.

In honour of the day, my mother would prepare a special meal; perhaps a bowl of cawl, a delicious stew made from neck of lamb simmered with vegetables, followed, if one was very lucky, by apple crumble. Welsh gingerbreads, which were a universal favourite (and which a Toronto friend makes to this day).

But in Canada, alas, spring's arrival is a much more uncertain affair. My 2001 calendar may be unspecifiable on the point ("First day of spring," it notes under March 20), but we all know that in practical terms the season's arrival is anything but predictable, except perhaps for those who live on the West Coast, where one can count on spring flowers being in bloom by mid-March. Writing of spring in Victoria in West magazine, the poet Susie Musgrave said: "When the rest of the country is lying in snow, the gum trees on the slopes are in blossom, and there's a subtle scent in the air of spring." It's true. My wife called a friend of hers in White Rock, B.C., one Sunday in early February. "I nearly didn't hear the phone," her friend explained when she finally answered. "I was working in the garden." Well, I thought promptly when my wife related this information, I'd be working in my garden, too, if it weren't buried under a metre-thick layer of ice and snow. And yet, one might be doing the same thing in Newfoundland, if only they could remain upright in the face of the heavy snowstorms and gale-force winds sweeping the Atlantic provinces.

Winter is undoubtedly Canada's season, one of our international claims to fame. "Another batch of very cold air is sweeping down from Canada," says the weather forecaster on American television, explaining why Florida temperatures may dip near freezing. And we who live north of the border smile approvingly, securely proud of our winter's severity and of our own weather. We can take it brand of hardships. But despite our loyalty to winter, I've never heard anyone actually
years for it. Nobody says in the late fall, "Only another month of this and, thank heavens, it will be winter." Scurly is winter upon us when we Canadians start sending signs of what spring has in store and predictions of its arrival date. In this country, it seems, we need a set of recognizable milestones—or as the Saskatchewan writer and poet David Carpenter aptly says, "seasonal rituals"—to register our progress and sustain our energy through the cold, dark months of winter.

As the ancient Greeks divined their future from the entrails of the fates of the Oracle at Delphi, so we seek our own auguries—sometimes from some rather odd sources. We estimate spring's arrival date (semi-factually, for sure) by observing whether or not a goldfinch can see its shadow in February. We verge all kinds of meaning to bird behavior ("Look at all those crows," a neighbor of mine said to me last Christmas; "It's going to be an early spring for sure"); and we enjoy arcane (and generally unfounded) explanations of natural phenomena. Early last winter we had a great display of northern lights, and an acquaintance of mine—a person of some stature in the community—asked me if I had seen it. I had. It meant, he went on to say, that we were in for a prolonged spell of extremely cold weather.

Depending on where you live in Canada, every person has his or her own set of omens. In the Prairies, for example, as David Carpenter writes in his collection of lyrical essays Coming Saskatchewan, an early hint of spring comes "when the first greege fly over your street. According to the Plains Cree, January is the Great Moon, February the Eagle Moon, and March the Moose Moon. One of Jethl March rituals is to watch the great flocks of returning geese circling the creek that drains the Waskukwain coulee...They use this coulee for the same reasons people did hundreds or even thousands of years ago. Refuge from winter. Yearning people and returning animals. Yearning for winter to be done."

In Central Canada, too, geese are reliable barometers of spring, and where I live, in Prince Edward County on the northern shores of Lake Ontario, it is possible in late March and early April to bird watch in the field and listen, night after night, to the booming of great flocks of geese on their way to their northern nesting grounds. In daylight, I have seen several hundred in the air at the same time. Some flocks have been measured by the thousands.

Interestingly enough, some species of birds appear to be governed more by the length of daylight than by other factors. Near my home, the first flock of red-winged blackbirds can be expected the first week of March—well ahead of their female counterparts—regardless of weather, and by the third week in March, the tree swallows show up, even in the least spring-like conditions.

Indeed, we humans can feel the call of the lengthening days, awakening us from winter's lethargy, telling us, no matter what the weather, that spring is on its way. "It won't be long now," you say to your neighbor, and even though you are both aware that there may be snowstorms and frigid weather yet to be endured before spring's actual arrival, you feel that you have passed an important milestone. Some milestones—like being able to drive to and from work in the light—are relatively minor or, rather, such as when we put the clocks forward in most parts of Canada, are important seasonal rituals. (And even the mnemonic we use to remind ourselves of the way to adjust our clocks—"spring forward"—speaks to our subconscious urge to hasten the season's processes of regeneration.)

In those areas of Northern Canada where the sun totally disappears in the winter, leaving the land in darkness for weeks at a time, its reappearance assumes an almost mythic significance, and some Arctic communities hold special celebrations to observe, as the Inuit have done for hundreds of years, this important annual event. The date of the sun's reappearance, of course, varies according to the community's latitude, but always occurs long before spring's actual arrival. Nonetheless, it signals that the corner on winter has been turned.

This year, for example, in the Nunavut community of Iqaluit, situated some 300 kilometres north of the Arctic Circle on an island off the east coast of the Melville Peninsula, the Return of the Sun festival was held on January 13, marking the day the sun first reappeared over the southern horizon, if only for a few minutes. The day-long celebrations, which involved most of the community's 1,300 residents and a number of visitors, included the construction of a large snow house, traditional drum dances, throat singing and an Arctic fashion show.

Most of us, the vast majority of Canadians who live on the southern rim of the country, do not have to wait for the sun's return, because it never completely goes away. But we do eagerly await its return to that point in the celestial sphere where it provides us with sufficient warmth for long enough every day to rekindle nature for another year.

If you ask a dozen friends what their favourite sign of spring is, you're likely to get 12 different answers, ranging from the emergence of the early woodland flowers, such as hepatica and trout lily (shortly to be followed by the magnificent trillium), to the first appearance in city gardens of the easily identified, but unreliable, American robin (in many parts of Canada some of them overwinter, and in our area winter flocks of robins often exceed 100 birds).

I get a somewhat sad response when I put the question to a friend of mine who lives in Quebec. "Every year," he told me, "I used to look forward to the day—usually in late February or early March—when I would drive from Montreal to the Eastern Townships and discover that the sugar maples lining the route were festooned with little buckets to collect the sap from which the maple syrup would be distilled. The fact that the sap was running was a sure sign that spring was around the corner, and it always gave a lift to my spirits. But nearly all the maples lining the highway were felled by the ice storm a few years ago. And I miss them with their little collecting buckets."

Fortunately, across the provincial border in Eastern Ontario, most of the maples were spared. Syrup production is not only an important economic activity in our part of the country, but part of our social calendar, too. Every year, friends, each perhaps contributing a dash to a potluck supper, gather at a neighbour's boiling shed for a "sugaring-off" party to sample the year's production and to celebrate, perhaps a little prematurely, the end of winter. Sure, chances are there will still be some snow, but its residue will be softer and moister than the serious midwinter stuff—"sap snow," we call it—and it won't stick around for long. And then, finally, it will be spring.

Or will it?

Well, it will be a gamble as usual. When it will come and how long it will last are matters that lie in the laps of the gods on the weather. But late or early, fleetingly or prolonged, it will return. And that's what's important.

Some years ago, in early September, I happened to find myself in the High Arctic community of Resolute and visited the local Inuit cooperative to buy a few supplies. There had been no summer to speak of in Resolute that year. A thick layer of ice already covered the harbour and the ground was deep in snow—the place had the appearance of digging in for a long siege. Out of curiosity, I asked the person behind the co-op's counter how people in Resolute spend the winter.

I still remember her reply. "We wait for the return of the sun," she said.

And so, indeed, do all Canadians, whether we live in Winnipeg, Ont., or Resolute, Victoria or St. John's. What makes spring so important to us is that, like the handful of other northern countries around the globe, we have a very deep appreciation of that life-giving commodity called sunlight.†
December 1988, there was a glut of crude oil, which resulted in its price dropping below $1 a barrel, as it lowest it had been since 1986. The Organization of Petroleum Exporting Countries (OPEC) (Saudi Arabia, Iran, Iraq, Kuwait, the United Arab Emirates, Venezuela, Qatar, Libya, Nigeria and Indonesia) and some non-OPEC oil-producing countries decided something had to be done to re-establish markets. This was called for a reduction in the amount of oil they produced. At the same time, there was an increase in the demand for oil, stemming from the rapid economic growth in almost all Asian countries (Japan being the exception), coupled with re-emergence of economic growth in Europe and Latin America and no deceleration of the robust U.S. economy. The result was a reduction of inventory. Shrinking supply and increasing demand lead to higher prices, and thus it was not long before the world was faced with the highest crude oil prices it had seen in 10 years.

The rise in crude oil prices has led to significantly higher prices for gasoline products and other products made from crude oil around the world. The situation, in turn, has led to increased attention from analysts and policymakers about the impact of the high oil prices on the economy. Among others, it is Alan Greenspan, chairman of the Federal Reserve Board, who, in a speech last October in Washington, D.C., "Over the years, he said, "the supply of gasoline is highly responsive to changes in demand and is subject to severe swings in the price of oil."

So how did the price of gasoline increase? A number of factors contributed to the increase in the price of gasoline. Among them:

1. **Increased Demand:** The high demand for gasoline during the summer months, particularly due to road trips and vacations, led to shortages and increased the price of gasoline.

2. **Stockpile Drawdown:** OPEC members, aiming to stabilize the market, reduced their production, leading to higher prices.

3. **Political Factors:** Events such as the Iran-Iraq war and the Gulf War had a significant impact on the global oil market, leading to price increases.

4. **Speculation:** Some analysts believe that speculation on higher oil prices also played a role in the increase in gasoline prices.

5. **Transportation Sector:** The cost of transportation, including the cost of gasoline, has increased significantly over the past few years.

6. **Renewable Energy:** The shift towards renewable energy sources has also contributed to the increase in gasoline prices, as these sources are often costlier than traditional fossil fuels.

In conclusion, the price of gasoline has increased significantly over the past few years due to a variety of factors, including increased demand, reduced supply, political events, speculation, and the shift towards renewable energy sources. The impact of these factors on the economy and society is significant and will continue to be a topic of discussion in the coming years.
Canada produces 2.3 million barrels of crude oil a day, of which 1.3 million barrels a day is exported to the United States. Canada also imports oil — about 800,000 barrels a day.

The rack price of gasoline is driven by what is happening in large product trading areas such as New York Harbor and the U.S. Gulf Coast.

The rack price of gasoline, not from increased refinery or retail margins. In fact, the refining and marketing entities that do not publish their earnings generally between 0.5 and 1.5 cents per litre.

Local gasoline markets lacking a retailer with a dominant market share are the most price competitive. Gasoline prices tend to be highest in places to which it costs a lot to transport gasoines or where the throughput is relatively low. These are often smaller centers in rural areas where higher margins are necessary to make up for lower sales volumes.

Price cycles tend to be a way of life in most urban centers in Canada. Gasoline prices usually fall well and then gradually take a leap — jumps of four or five cents a litre are not uncommon. Why are there these cycles? There are several economic reasons for gasoline prices.

In Canada, there are 19 oil refineries, operated by 11 different petroleum companies. In the United States, most refineries are domestically produced crude oil, and central and Eastern Canadian refineries use a combination of domestic and imported crude. Why do refineries in Central and Eastern Canada and imports crude oil? Sometimes, it is because refineries are equipped to refine only certain grades of crude oil and those types may only be available from offshore sources. Also, it is often more efficient and economical for oil producers in the West to export oil to the United States Midwest than to send it east, and for central Canada refiners to import oil that is delivered to East Coast depots from offshore sources.

In Western Canada, the price of Edmonton Par, a high-quality, light crude oil, serves as the benchmark for all varieties of crude oil produced in the West. — other crude oils are priced a certain amount higher or lower than Edmonton Par, depending on their comparative quality. In turn, the price of Edmonton Par is based on the price at which West Texas Intermediate is sold in Chicago.

Since this is the area of the United States, the price of exported Canadian crude oil must compete. In Eastern Canada, oil prices are based on crude oil from the North Atlantic, namely North Sea Brent.

Crude oil is refined into a variety of products, including gasoline, diesel fuel, heating oil, jet fuels, and asphalt; it stands to reason, therefore, that the prices of these products will be determined to a significant degree by the price of crude oil. But crude oil isn’t the only determining factor. Weather, for example, plays a vital role in determining price. A severe winter in the United States, for example, will deplete inventories, causing the price to rise. Low gasoline inventories going into the heavy demand period for gasoline in the United States this past summer led to maximum quantities of gasoline and minimum quantities of heating oil being manufactured, resulting in heating oil inventories in the northeastern states that were 40 percent less than in 1989. This put pressure on heating oil prices and caused crude oil supplies to be diverted from gasoline production.

The rack price of gasoline — in other words, the basic wholesale price of gasoline that is bought either on a spot or term (contracted) basis from distribution terminals and importers on what a price is today, tomorrow, and more. The rack price of gasoline is determined by what happens in the West, and the rack price of gasoline is based on Federal energy programs such as New York Harbor and the U.S. Gulf Coast. Like motorists, wholesale gasoline buyers are very price sensitive when choosing where they make purchases and will tend to switch suppliers to take advantage of lower prices, with the result that rack prices are generally uniform in a given area in order to be competitive. These prices may differ from one area to another, but the difference generally reflects only transportation costs. Rack prices are published, or posted, publicly, although refiners will frequently sell gasoline at an undisclosed discount to those buying large quantities. In the end, however, wholesale buyers will not pay any more than they would for the alternative — imported product.

In most regions of Canada, the three major integrated producers of gasoline (the majors) which include Imperial Oil, Petro-Canada and Shell, as well as at least one large regional producer such as living in the Maritimes, Ultramar in Quebec, Sunoco in Ontario and Chevron in British Columbia, operate retail outlets. In addition, there are the "independents," smaller companies that have retail outlets but do not produce gasoline. All told, there are about 13,500 retail outlets, or service stations, in Canada today, 8,500 fewer than in 1989. The result of this reduction is that the average amount of gas sold at each outlet (the "throughput") has risen enormously, and there is greater overall cost efficiency.

More than half of the retail outlets in this country are leased to their operators by the majors or are owned and operated by independents. On the whole, the independents tend to be located in smaller towns and set their own prices in urban centers; most gas stations selling major brands are company owned — most are operated by agents with the companies setting prices.

What all this means is that today, tomorrow, and more, and more service stations are providing ancillary services such as convenience stores and car washes, which, in fact, provide a much greater profit margin than the selling of gasoline. Despite public perception, when integrated oil companies report much higher profits, as they do during periods of high crude oil prices, these additional profits tend to result from the production of crude oil, not from increased refinery or retail margins.

In fact, the refining and marketing entities that do not publish their earnings generally between 0.5 and 1.5 cents per litre.

Local gasoline markets lacking a retailer with a dominant market share are the most price competitive. Gasoline prices tend to be highest in places to which it costs a lot to transport gasoines or where the throughput is relatively low. These are often smaller centers in rural areas where higher margins are necessary to make up for lower sales volumes.
## Retail Gasoline Markets

Retail gasoline markets may become even more competitive as a result of the growing presence of chains of extremely high-volume retail gas bars at bar supermarkets and discount stores (such as Costco and, in the West, Safeway). Whether these chains can become sufficiently profitable to be a serious force in Canada is unclear, but in the United States, France, and Britain, where they are already well established, they are proving very successful.

Over the years, the federal Competition Bureau has carried out investigations of the gasoline industry in response to public concerns that competition was being thwarted. In early 2000, the Bureau reported on three investigations following claims of artificially high gasoline prices in 1999. These investigations completely exonerated the industry of anticompetitive behaviour. Two concerns local markets, Kenora, Ont., and Conception Bay South, N.L., and the third related to cross-province gasoline price increases that occurred in July 1999. With regard to the Conception Bay South case, the Bureau stated: "there is no evidence to support allegations of price fixing, abuse of dominance, price maintenance, or conspiracy by gasoline suppliers in Conception Bay." This also reflected the findings regarding the Kenora case. The Bureau’s 1999 price rise investigation concluded: "the price increase was not caused by increases in the price of crude oil... The evidence indicates that the gasoline companies made independent decisions... There is no evidence to suggest that gasoline companies communicated or co-operated with one another when implementing price increases. The July 1999 price increases, while domestic, were the result of normal market forces." In a new study sponsored by the federal government, "The Final Five Feet of Hose: The Canadian Gasoline Industry in the Year 2000." The Conference Board of Canada comes to similar conclusions.

### Retail price components

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### Canadian taxes and crude oil costs in 2000

- **Constituted, on average, more than 80 percent of the pump price.**

### The way gasoline prices evolve

The way gasoline prices evolve is unlikely to change very much in the near future, although there is an appreciation in the price of crude oil.

### Canadian Gasoline Industry: A Review

- **Consumers are much more aware of fluctuations in the price of gasoline than in the price of most other goods.**
- **Interestingly, since 1994, using prevailing exchange rates, Canadians have paid slightly less for their gasoline (including taxes) than U.S. motorists in border states.** Fuel Facts, a bi-monthly publication that monitors changes in fuel prices, examined retail gasoline prices in 10 cities in Canada and five in the United States for the four weeks ending on January 23, 2001, and found that the average Canadian price for regular gasoline was 39.2 cents a litre compared with a U.S. average of 45.7 cents a litre (the average for the 12 months ending with January 2001, according to Fuel Facts, was 45.64 cents a litre in the United States versus 41.33 in Canada). Among the reasons given for this was a dramatic drop in the combined gross refining and marketing margins on the Canadian side of the border, resulting from increased throughput at some retail outlets, a consequence of the closure of smaller and inefficient outlets and the growth of profitable ancillary services, such as convenience stores. Another reason was the introduction of new reformulated gasoline standards in the United States, which raised U.S. refining costs and, consequently, pump price. The average retail price is significantly higher in Canada than in the United States: 69.4 cents a litre compared with 62.5, according to Fuel Facts. The difference is the result of tax, which averages 30.2 cents a litre in Canada in contrast with only 16.8 cents a litre in the United States. (Canadian taxes and crude costs in 2000 are estimated, on average, more than 90 percent of the pump price.)
- **Canadian taxes vary from province to province.** As well, municipal taxes are sometimes applied (municipal taxes are sometimes applied in an additional 1.5 cents a litre, and in Vancouver, 4.5 cents a litre). The federal excise tax on gasoline is 10 cents a litre (up from 8.5 cents a litre in 1995), provincial excise tax ranges from nine cents a litre in Alberta to 16.5 cents a litre in Newfoundland. Both federal and provincial excise taxes are applied per litre, rather than on a percentage basis, and therefore do not increase — or decrease — with the pretax price. In addition to fixed proportions, the GST (federal government sales tax) of seven percent, which is an ad valorem, or percentage, tax and so increases in absolute terms when prices increase. In Quebec, provincial sales tax is levied on the GST as well, making for a combined GST and PST of 15.05 percent. And in Newfoundland, Nova Scotia and New Brunswick, where GST is combined with the provincial sales tax, there is an overall rate of 15 percent. Clearly, taxes account for much of the interprovincial differences in retail gasoline prices. There is also a key reason why pump prices in Canada are higher than in the United States. That being said, taxes in Canada are not as high as in much of the rest of the industrialized world. For example, they are only about a third of those prevailing in major Western European countries.
- **Labor costs price increases, which seemed particularly high when contrasted with the abnormally low price of gasoline, are 1998 and 1999.** However, several factors have contributed to the decline in gasoline prices. In Canada, truckers protested, but not to the extent of their European counterparts, perhaps because fuel prices are much lower in Europe. In Canada, only the Alberta government has cut fuel taxes, although other relief in the form of cuts to capital gains and income tax has been implemented.
- In the long term, what steps should be taken to provide energy at reasonable prices? Conservation of fossil fuels and exploration for new sources of oil are a priority — prices of oil and gasoline must be high enough to encourage consumers to conserve energy supplies and to make exploration for new sources of oil worthwhile.
- What is a sensible policy is regulating gasoline prices. Perhaps regulations should lead to fewer fluctuations in price, but this would be detrimental to consumers, since, most likely, gasoline retailers would have to raise the price of gasoline if they could not raise the price again at a later time without appealing to a regulatory body. Regulations would also require enforcement, which would be costly. At the moment, only Prince Edward Island regulates pump prices, and there is no evidence that, over time, prices are lower than that market or that the retail sector is more efficient than in areas where prices are not regulated. However, when the price of crude oil drops, prices will remain higher in Prince Edward Island than in the rest of the country, where the drop will be felt more quickly. It will be the reverse when the price increases.
- Regulation smooths price levels, but at cost.
- Even with the relatively high prices at the pump in recent months, it is important to remember that Canadians are able to buy gasoline more cheaply than consumers in most industrialized countries — the United States, as a result of lower fuel taxes, being the only notable exception. At the retail level, competition seems to be fulfilling its role. And while successive investigations have vindicated the oil industry, the watchdog role of the Competition Bureau is a good insurance policy, as it is for any industry where four or five firms claim a large market share.
An Ancient Highway

Stretching from Yukon Territory to New Mexico, the Old North Trail has been used by North America's aboriginal people for thousands of years

BY GRAHAM CHANDLER

Margaret Plain Eagle lives in the little town of Brocket on the Peigan Nation Reserve in windswept southwestern Alberta. Relaxing on her comfortable couch in a living room decorated with family photos and her children's baseball trophies, she talks about raising 19 children. "We did it different in the old days," she says, smiling the charming 69-year-old Blackfoot.

Many things were different for the First Nations of the Plains in the old days, as, the elders say, the "dog days," an expression whose origin dates back to before the 1700s, when horses had not yet arrived on the northern plains of North America. Those were the days when the plains people hauled their tepees and possessions on travois, V-shaped frames formed from tepee poles laid across the backs of dogs. Dragged behind the dogs, the poles pulled twin runners across the western Prairies and foothills, permanently marking, over thousands of years, routes like the one known as the Old North Trail, part of which passes a few kilometres to the west of Plain Eagle's living room.

The Old North Trail is actually a series of ancient paths that extend over a corridor—approximately 25 kilometres wide and stretching from the shores of Watson Lake in Yukon Territory to the deserts of New Mexico.

In Canada, the trail roughly tracks what geological and archaeological evidence suggests was the original "ice-free corridor," used by the First Peoples who migrated to the American continent from the frigid reaches of Siberia during an era of reduced ocean levels more than 14,000 years ago, when there was a land bridge across the Bering Strait.

Imagine what the trail would have been like. A lone backskin-clad traveller packing stone-tool materials north from Montana, atoll is device for increasing the velocity of a thrown spear in hand, might stop to chat with a small band of men, women and children. The latter are perhaps making their way, single file, amid wicks of dust raised by travois being pulled by panting dogs to a buffalo jump 100 kilometres or so over the next grassy rise. A woman in a beaded leather dress might offer to swap the hungry traveller a bag of pemmican for a small sherd of obsidian that her husband would use to make a spear point for the hunt.

In the southern half of Alberta and in Montana, one can still see many of the runs left by the travois, which were pulled first by dogs and later horses. About 80 percent of paths between Calgary and Helena, Montana, are still recognizable (they are, however, more visible south of the border, where there has been less cultivation and development and where there's more unburnt birch and fir)." There's a lot less of the trail left in Canada than in Montana," says Brian Reeves, a heritage resource consultant and professor emeritus of archeology from the University of Calgary. "Most of the land it traversed in Alberta has been farmed or developed or road has been built over it."

Reeves is a fourth-generation Albertan who spent a career researching the archeology and history of the southwestern part of the province and the Old North Trail.

Not far from Plain Eagle's house, the trail passes by the towering front ranges of the Rocky Mountains, or, to use the Blackfoot name, Mitakiki, meaning backbone, and I have come to visit her and her older sister, Elsie Crowshoe, to learn something of the native lore that surrounds the trail. Plain Eagle turns to her sister, who speaks only Blackfoot, to ask what she learned about the Old North Trail from elders.

Crowshoe's eyes squint as she stares out the window towards a willow copse on a bank of the Oldman River before sighing. Plain Eagle translates her words: "We know all about the trail from Napi, the creator. Our legend has it that he travelled the Old North Trail from south to north, creating the land, plants and animals along the way. He taught us to look at the moon and the birds that fly south in winter—like the doves and the crows. The earlier they fly south, the harder the winter will be. We could also tell how bad the weather was going to be by looking at the moon."

Plain Eagle illustrates this by drawing a diagram of two different crescent moons, one looking more like a crescent and the other closer to the letter M. "The first one here says bad weather is coming, and the other one says it will be mild," she explains. And if there were lots of sagebrush, chokecherries and huckleberries, you could tell there was going to be a hard winter—people would go towards the mountains and valleys for shelter, wood, game and water.

The Old North Trail is actually two separate trail systems, an inner one that runs through the foothills of the Rockies and an outer one that follows a route through the prairie. "In the summer, people could make better time on the prairie, without the hills, rivers and bushes to get in the way," Plain Eagle interprets. "There was always game around in the summer. People would camp near the buffalo jumps. But in the winter it was too dangerous on the open prairie, so our people would travel to the foothills, where there was more shelter, wood and game and less wind."

Reeves has researched most of the inner and outer trail systems from north of Calgary to the southern border of Montana. From the air, he says, one can identify the trail by vegetation, which is different where the ancient tracks have grown over. Walking parts of the trail, he has discovered...
Less than a kilometre from where the outer trail crosses the gully is the Old Woman's Buffalo Jump.

"You had to be a brave man to do this," Kyle Blood, an interpretive guide at Head-Smashed-in Buffalo Jump, 90 kilometres to the south, tells me a few days later. The wind mingles his hair as he stands above the cliff overlooking a section of the trail. "Warriors had to have completed their vision quest, which they did around the age of 14, before they were allowed in the hunt," he explains.

Cliffs that the buffalo couldn't detect until they were at the edge of them were selected as the jumps. An elaborate system of drive lanes created by ancient hunters channelled the herd towards the clifftop. The animals were contained by the young men, who disguised themselves as buffalo calvves or coyotes and hid behind stone cairns and bashes, which served as channel markers. They would puit out every now and then. The beasts would become confused, and in the ensuing pandemonium of thundering hooves and dust, they would fall one another over the cliff. Hunters at the bottom of the jump would move in with spears or arrows to kill the animals quickly.

After the hunt, camps would be busy as hales were removed, stretched onto frames, scraped and rubbed with brains to care them. Huge boiling pots would steam and bubble with meat and bones. There was a use for every part of the buffalo - follow-
move 30 to 50 kilometres a day along the outer trail, Reeves reckoned. But he suggested that whole bands, travelling together with full
heft, would only have made 12 to 15 kilometres a day. They would stay at clusters of campsites at wooded, game-rich river crossings like Willow Creek.

Sections of the outer trail pass through hold-open plain, where it would be easy to lose one's way. "Travelers should use landmarks such as trees to guide their way. Wooden markers would tell people which way the trail went," Crowshoe explained through her sister.

Not far from the Willow Creek campground, I clambered up a ridge where one of these navigational aids, a split erratic boulder the size of a small cabin, perched alone like a sentinel scanning the horizon. Those erratics look boulders ranging in size
tacular tract of foothills popularly known as the Whalebake, which forms part of the Rocky Mountains Forest Reserve. The inner trail system threads its way here among the trees that pitch the sides of the foothills. Sharp-tailed grouse forage among tangleberries and wild strawberries that cover the forest floor beneath cottonwoods and quaking aspens.

From the Whalebake, I head south via Highway 6 towards Waterton Lakes National Park and intercept the inner trail system where it curls through Indian Springs Ridge. The steep face of Chief Mountain, screened to the Blackfoot, extends down to me from Montana. I decide to spend the night in Cardston, Alta., which lies on the edge of the outer trail.

My final night on the trail I spend at the Belly River campground, close to where the inner trail disappears from Canada into the eastern foothills of the Montana Rockies. At three o'clock in the morning, answering a call of nature, I crawl groggily from my tent and am bedazzled by dancing pastel blues, greens and yellows pulsating across the black sky. I can't help but think of the Blackfoot camping here under the stars 1,000 years ago and wonder what went on at these flamboyant spurs were telling them. According to Plain Eagle, when the northern lights are bright, they signify the arrival of a fence wind and bad weather.

The big wind never came, but winds of change continue to transform the Blackfoot country, where once men, women and children roamed prairie and hills along the Old North Trail.

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In Closing

Volunteer Lessons

I had my first encounter with volunteer work when I was six and living in London, England. My mother was involved with a women's group that helped shut-in seniors. One day, she announced that she was going to deliver food parcels to a number of them and that I was to help. It was late afternoon and nearly dark when we set out. I can still picture the rain falling steadily on the car window as I looked out at the streets of dingy row houses we drove down as we made our way from one cold, grey dwelling to another. I had never witnessed poverty before, never realized that people had to live in tiny rooms with cracked plaster and no heat unless there was an extra shuffling to put in the meter. I didn't want to stay to drink the cups of tea that were graciously offered by elderly people whose joy at seeing us revealed the loneliness of their lives. But a look from my mother made it clear that I must. And so I did — and smiled till time to pass so I could return to the more hospitable home I knew.

Forty years later, the memory of that excursion remains vivid. As much as I couldn't wait to get those visits over, I look back from my adult perspective and am very grateful that my mother insisted I accompany her that day, that willingly or not (and I suspect the former), she awakened my young mind to the realities of the wider world.

As time passed, my mother engaged my help in other volunteer activities of her women's group. My favourite was an annual jumble sale, through which money was raised to provide the shut-in seniors with an outing. I was to be assigned to assist at one of the stalls, where I helped to price items and serve customers. It made me feel worthwhile, and I was always allowed to choose something from the stall for myself.

I enjoyed the outings a lot less. A bus would take the seniors and those escorting them to the sea or some picturesque garden, and on the way back the group would have afternoon tea in a restaurant.

To me, the trips seemed extremely boring, consisting mostly of driving and washroom stops. It horrified me when my mother told me that for some of the seniors, these outings were the highlight of their year. "Some people here don't get past their local shops other than on these trips," she said firmly. And I learned a little more about the world around me.

Volunteer work is like that — it gives you windows on worlds you might not normally come in contact with. And there are other benefits too, like camaraderie and the knowledge that, grain of sand or not, you can make a difference. There is also the enormous value of the work done by volunteers.

I'd like to be able to tell you that I am now a tireless volunteer, but I can't. What I can say is that I do little volunteer work, and that wherever I do, I'm reminded of how satisfying it is and that I really should do more.

Like many parents, I tend to volunteer at my children's schools and other organizations with which they're involved. As such, I have participated in activities ranging from field trips and Hot Dog Nights to planning cabinets and providing snacks to choir boys. And just as helping with the shut-in seniors provided me with a window on poverty and loneliness, so helping with organizations my children are associated with has provided me with a window on parts of their lives

to which I am not usually privy.

And so it is appropriate that we celebrate the 7.5 million Canadians who do volunteer work, making life better for all of us. As Lila Goodey, president of Volunteer Canada, notes, "Volunteers are instrumental in the creation of a civil society."

- Sarah Lansley

The United Nations has declared 2001 International Year of Volunteers.

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