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Oil Springs, Ontario: The Living, Breathing Dinosaur

Charles Fairbank

Fig. 1. Postcard of the Fairbank Oil Fields, Oil Springs, Ontario, depicting the three-pole derricks above each oil well, circa 1900. Oil Springs boomed from 1858 to 1866, but production continues to this day. Courtesy of the Lambton County Archives.

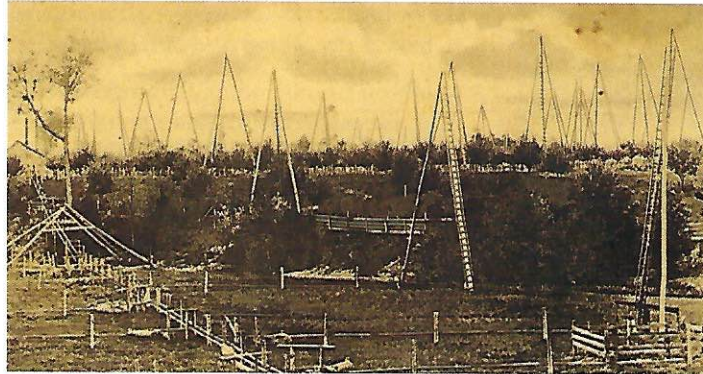


Fig. 2. The jerker line, devised in 1863, transfers power from the rig to the pumpjack at each well. Previously, expensive and awkward steam engines were needed at each well. There are six miles of jerker line at Fairbank Oil Fields. Photo courtesy of Fairbank Oil Fields.



Oil technology of the 1860s is preserved and used daily in Oil Springs, Ontario. For 157 years, the Fairbank family has been operating this oil field.

A small Canadian village, 18 miles inland from Lake Huron, contains a multitude of big stories. In southwestern Ontario's Lambton County, 90 minutes northwest of Detroit, Michigan, is the preserved pocket of Oil Springs. My connection to this place is personal. My great-grandfather, John Henry Fairbank, arrived in Oil Springs in 1861, and by the 1890s he had become the largest oil producer in Canada. Today, I am among the smallest oil producers and produce a similar amount as my great-grandfather on the 600 acres of Fairbank Oil Fields in Oil Springs.

Each year this operation produces roughly 24,000 barrels of crude. What sets Fairbank Oil Fields apart is that it operates 300 wells using authentic nineteenth-century technology. The wells operate 24 hours a day and have

been operating for 157 years. These systems and technologies, common here in the 1860s, have largely disappeared over time (Figs. 1, 2, and 3).

It is actually oil farming that is done here: harvesting an energy source that has been cooked by the planet for millions of years. Crude oil is extracted, but there is no drilling. Most of the wells were drilled more than 100 years ago.

The legacy of Oil Springs is what matters—preserving this brilliantly simple technology and the authentic cultural landscape that would have been the norm in the mid- to late nineteenth century. Those growing up by the oil fields of Petrolia and Oil Springs 60 to 70 years ago felt a fierce pride in this contribution to the world. That pride lives on.

Oil Springs boomed from 1858 to 1866, triggering an oil rush. This location, in Lambton County's Enniskillen Township, was a hotbed of innovation. From this spark, a global energy revolution spread with the speed of a wildfire. The history of oil in this area stretches back much further in time. It is clear that First Nations people were using the crude long before contact.

Today at Fairbank Oil Fields, visitors often find it shocking to see this early oil technology still being used. It exists as a dinosaur in the modern world. When Dr. Emory Kemp of West Virginia University first arrived in the 1990s, he was stunned. Kemp is the founder of the university's Institute for the History of Technology and Industrial Archaeology and does not encounter many surprises. It was as if he had been studying dinosaur fossils and stumbled upon a living, breathing brontosaurus.¹ "Stunningly archaic," said another visitor recently.

The Nineteenth Century Represents Larger Stories

Beyond the actual technology and site are the larger ideas and stories these components represent. One of those larger stories recognizes indigenous people actively pursuing oil here prior to its "discovery" in the 1850s. As early as July 1861, Charles Robb reported

his findings in Lambton County in *The Canadian Journal*:

And in Enniskillen, the great centre of the oil spring region in Canada, deers' horns, and pieces of timber bearing the marks of the axe have been dug up from considerable depths below the surface, in what appear to have been old wells.²

Other writings of the 1860s tell of First Nations people laying blankets on the oil springs, and then wringing them out to collect the oil for medicinal use.³

Lambton County administrators have held discussions with the founder of Archaeological Services Inc., based in Toronto, looking for guidance in researching indigenous history. In Canada, private firms, not academics, conduct most archaeological work. Within Lambton County are three First Nations communities, and the county is working with them to learn more, conduct research, and to celebrate this largely untold story.

Information is also being exchanged with the public history program at the University of Western Ontario in London, Ontario. No archaeological investigation has ever been conducted on Lambton County's oil fields, and it is a must in Oil Springs' future.

Another larger story: The Geological Survey of Canada, headed by William Logan, started studying bitumen samples from oil seeps as far back as the 1840s. Logan was looking for a substitute for coal, which did not exist in Canada West (Ontario).⁴

Word of the bitumen spread. By the 1850s, two brothers, Henry and Charles Tripp, bought large swaths of land in Enniskillen Township containing two gum beds and six oil springs. They boiled the bitumen in crude kettles to manufacture asphalt. After many bureaucratic delays, in December 1854 they were granted permission to establish the world's first petroleum company, the International Mining and Manufacturing Company. This allowed them "to erect works and manufactories for the purpose of making Oils, Napthas, Paints, Burning Fluids, Varnishes and other things of like nature, on their property in Enniskillen."⁵

Logan exhibited the Tripps' asphalt at the Paris Universal Exposition in 1855, where it won an honorable mention.⁶ The Tripps' asphalt was so impressive that Paris ordered seven boatloads to help pave its streets. However, the Tripp brothers found it impossible to transport the asphalt over Lambton County's appalling clay roads. Unable to ship their product, they went bankrupt and sold their land to James Miller Williams.

Williams was not interested in making asphalt. Instead, he wanted to make kerosene from the bitumen of the gum beds. However, when digging for water there, he was surprised to strike oil. He not only produced oil; he refined it into kerosene and marketed it as "illuminating oil" for lamps. This discovery was met with much excitement in the local newspaper. The *Sarnia Observer* fueled speculation by reporting "that the supply of fluid thus accidentally discovered will continue an almost inexhaustible source of wealth, yielding, at the lowest calculation, and with not greater flow than at present, not less than one thousand dollars per day of clear profit."⁷ This was August 1858.

It was a major energy shift. Leaping from destructive distillation of solid coal for kerosene, to distilling liquid petroleum was a huge idea. And this has made all the difference. Coal was difficult to obtain, involves dangerous work underground, and because it is solid, requires more complex distillation to make it a liquid. Petroleum was simpler because it was already liquid; it seemed easy to access; and the danger was lessened. Those concerned about whales gave thanks for another source of lamp oil.

The Beginnings of the Oil Rush and Fairbank Oil Fields

In the spring of 1861, my great-grandfather, John Henry Fairbank, was 29 and working as a surveyor assigned to the rapidly growing Oil Springs. He was astonished to find 500 men toiling over shovels and dreaming of a fortune in oil. He wrote excitedly to his wife, Edna, at their farm in Niagara Falls, Canada, to say he was going to try his

hand at oil. Edna, at home with their two young sons and averse to risk, was aghast. They could not agree, and they remained apart for five years.

Over these years, a wonderful series of letters between the couple detail the conditions in Oil Springs. This is supplemented by John Henry Fairbank's diaries, which an archivist has recently transcribed for Fairbank Oil Fields to make them accessible to future researchers. Extensive newspaper reporting in *The Globe* of Toronto and the *New York Times* has also been archived.

The first wells in Oil Springs were dug by hand down to the rock. Soon afterwards, they were dug deeper, using spring poles to chisel into the rock. Drilling with the help of a steam engine soon followed. The year 1862 was pivotal. The first gusher was struck when John Shaw drilled 158 feet into the rock, blowing in at 3,000 barrels a day.⁸ Oil shot high into the air above the trees and spewed for several days before the well could be brought under control. No one present had ever seen a gusher. It was a first in this country. Within the year, another 32 gushers were struck in Oil Springs.⁹

With news of the gushers, the frenzied oil rush was on. Men flocked in from all directions. Investors from England arrived, intending to ship the crude to Britain, thinking oil could replace coal.¹⁰ The village's population soared to 4,000. Nine hotels flourished, along with two banks. Kerosene lamps lit the main street at night, and Oil Springs had the finest paved street in the country, with a mile and a half of double-width white oak.¹¹

But by 1866, oil production was dropping. A new phenomenal well was struck in Petrolia, six miles to the north. Overnight, men left Oil Springs in droves. Only 300 stayed in Oil Springs. Marginal production has continued to this day, and the population hovers near 700. Petrolia's boom would last 40 years. It became the oil capital of Canada, providing 90 percent of Canada's oil needs until 1900.

The importance of the early oil technology in Oil Springs is that it

sped the development of evermore-sophisticated technology, processes, and rail. It also made Lambton oilmen early experts who played a key role in opening oil fields around the globe. By 1874 Lambton County had a skilled workforce but an over-drilled oil field. When other countries needed drillers to explore potential oil fields, they came to Canada to find them. In the United States, drillers were not available; they were busy with new prolific areas within the United States.

Five hundred men left Lambton County over a 70-year period to drill in 86 countries. Starting in 1874 with a trip to Java, they traveled to far-flung shores in South America, Asia, Australia, Africa, and Europe. They took their valuable tools with them along with the Canadian system of pole-tool drilling.¹² In the history books, these men were called "the foreign drillers." In contemporary accounts, they are referred to as "the international drillers".

The Technology of Fairbank Oil Fields

Fairbank Oil Fields operates a complete system of nineteenth-century oil production. It contains the components for drilling, extraction, power supply, storage, brine collection, and shipping. The components are from several different eras, reflecting improvements through the decades. They are all connected and must work together (Fig. 4).

It begins at the powerhouse, the pumping rig. Here, a five-horsepower electric motor is reduced through belts, pulleys, gears, and cranks. A rig can pump up to 50 wells, and Fairbank Oil Fields has six rigs.

The system is balanced, so that as one well is pulling up, another well on the system is dropping down. It is particularly efficient because the wells are helping each other. Originally, steam engines powered the rigs. The system was "modernized" 100 years ago when electricity arrived in Oil Springs. Oil was one of the earliest industries to awaken to the availability of hydroelectric power from Niagara Falls.

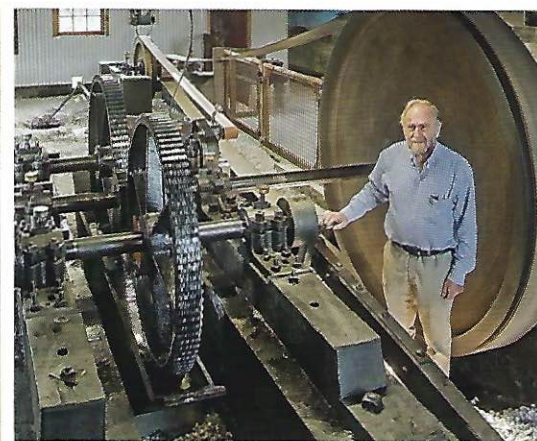


Fig. 3. Fairbank Oil Fields operates a complete system of nineteenth-century technology. Since the 1860s these rigs or powerhouses have supplied power to the oil wells. There are six rigs at Fairbank Oil Fields, and the bullwheel shown here with Charles Fairbank is six feet in diameter. Each powerhouse uses a five-horsepower motor and operates around the clock. Photo courtesy of Tony White.

Fig. 4. The Oil Museum of Canada in Oil Springs, Ontario, includes a popular interactive exhibit where visitors step inside an international driller's tent. Here, they learn about the 500 local men who took their oil expertise and tools to 86 countries to open oil fields between 1874 and 1945. Courtesy of the Oil Museum of Canada.

The speed of the rig is reduced to 11 strokes per minute, transferring motion through the jerker lines to the pumpjacks at each well. Each rig has its own personality and voice. It creates a constant rumble with the gears, and there is liveliness to it.

The wooden bullwheel at one rig is six feet in diameter. Bearings on the main shafts are of poured babbitt metal. The main drive belt has been replaced once since 1930. The rig thunders along year-round.



Fig. 5. Fairbank Oil Fields wooden pumpjacks blend into the cultural landscape just as they did in the 1800s. Photo courtesy of Tony White.

Fig. 6. Cast-iron field wheels are hubs for the jerker lines that radiate in different directions. Once common, they are now rare, and there are 12 at Fairbank Oil Fields. Photo courtesy of Carol Graham.



run parallel to the ground, suspended by iron hangers. The hangers act as pendulums when the jerker line swings, or “jerks,” back and forth.

Wood is used for the jerker because it is light and far superior to metal, which expands and contracts with temperature changes. Wood has more character, is readily available, and is economical. Swinging at a slow, steady rhythm, the jerker line is relaxing to watch. It is like a measured two-step, swinging at 11 times per minute, the same pace as relaxed breathing. The “song of the jerker” is forever changing; varying with wind and weather. It is one of the few machines that “sings” while it works. The hangers sing at high-pitch; the field

to its essentials, it teaches the elements of our business.

The jerker line transfers power from the rig to the pumpjack, or teeter totter, at each well. These pumpjacks are wooden, just as they were in the nineteenth century, making them blend into the landscape. The field crew of seven can easily manufacture and maintain them. The up-and-down motion of the pumpjack’s walking beam causes the valves below to pump oil to the surface. Simple geometry allows changing the stroke on a well from inches to feet. The shiv wheel of the pumpjack is cast iron. Many of these shiv wheels have been here for the entire life of the field. The nose of the beam is connected to the rod with a chain (Fig. 5).

When the fluid is pumped, it is not pure oil. For each barrel of oil pumped, there are 99 barrels of salt water and suspended clays (a barrel of oil is 35 imperial gallons, 42 American gallons, or 159 liters). To separate the oil from the brine, the oil is sent to a separating tank where the oil flows into a holding tank and the brine is siphoned into a disposal well.

The field wheel is essential to the jerker-line system. The two main lines from the rig cause the field wheel to rotate back and forth. When the wells are scattered, the field wheel acts as a hub, radiating jerker lines in different directions. It is cast iron and built to last (Fig. 6).

A heavy timber “bent” holds the field wheel horizontal to the ground so it can oscillate. While the field wheel was once common, now it is rare. Fairbank Oil Fields has 12.

In the 1940s the landscape of Oil Springs was striking. It was a forest of three-pole derricks, 40 feet tall. A three-pole derrick had been erected atop each well to maintain the well. To repair or replace the 400-foot pump that leads down to the oil, it must be pulled out of the ground. Using cables and pulleys, a team of horses would pull forward, lifting out the pipes and rods (Fig. 7).

Horses were part of the landscape here until the 1950s, when a powerful windstorm knocked down hundreds of three-pole derricks. These derricks were

From the rig, a wooden “jerker-rod system” transfers the power to the wells. It is a system that works best on shallow oil fields; in Oil Springs, the wells are 400 feet deep. This multiple-pumping system was devised by John Henry Fairbank in 1863 to eliminate the expense of needing a steam engine at each well. The jerker line was widely copied but never patented.¹³

The jerker lines, if stretched from end to end, would measure six miles. The jerker line rods are made from 16-foot lengths of wood, cut into two-by-twos, and joined by metal plates. The rods

wheels supply the bass. When two rigs are at different speeds, they create a Bach fugue. This distinctive sound, an intangible aspect of heritage, remains unchanged since the 1860s.

Many find the jerker line system primitive or quaint. Some realize it is a lot of trouble. An engineer from Imperial Oil watching it once declared, “It won’t work!” Fairbank Oil Fields continues with the old ways because the Oil Springs field is a legacy that transcends the individual. It is a creation of all the men who have ever worked this oil field. It reminds us of our beginnings. Stripped

made from black ash trees, which have disappeared. With these losses, local oil producers converted to portable pulling machines pulled by tractors. It could be argued this change is regrettable, in that horses are better than tractors. They do not spin their wheels in the mud. Their fuel is homegrown, and they have more character. On Fairbank Oil Fields is the world's last original three-pole derrick of black ash.

Another kind of maintenance is done at the blacksmith shop. Much of the oil field maintenance is done on site. The blacksmith shop is the center for making the hangers used in the jerker line. The men also repair other metal oil field components. When electricity came to the property, the boiler room became redundant, so it was converted to a blacksmith shop (Fig. 8).

In summary, the technology created by Lambton's early oilmen was ingenious. There was no manual to follow, no existing tools to perform specialized tasks. They created solutions, methods, and tools on the fly. These authentic artifacts are not only preserved at Fairbank Oil Fields; they are fully functional. They are also numerous. According to a professional inventory done for the Oil Heritage Conservation Plan in 2010, there are more than 700 features in this immense collection of fixed material objects. If it included moveable objects, the total inventory would reach more than 1,000.¹⁴

The technology blends into the cultural landscape, and the buildings do as well. Only the barn is taller than two stories. Everywhere there is a preponderance of wood artifacts. The smell, another intangible feature, is typically rural with rich organic vegetation and sheep. On some parts of the oil field there is a smell of oil. The landscape is comprised of grasslands, woodlands, and wetlands full of biodiversity, wildlife, and domestic animals.

The sheep graze all day in the oil field, with a llama protecting them from coyotes. Rich insect life attracts birds, frogs, and toads. The property is also a bird paradise, with 134 species recorded so far by naturalist Larry

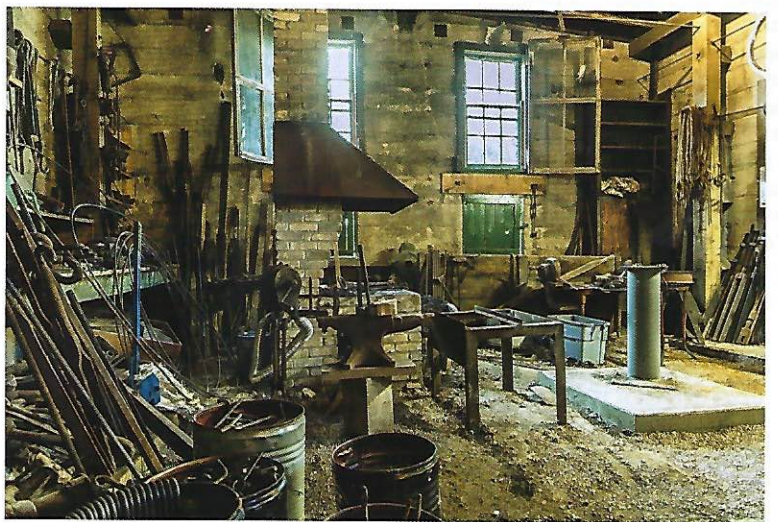


Fig. 7. These three-pole derricks at Fairbank Oil Fields are erected over two of the 24 gushers of 1862. Photo courtesy of Tony White.

Fig. 8. The blacksmith shop in a converted boiler room is used to make hangers in the jerker line and repair other metal oil field components. Photo courtesy of Al Hayward.

Cornelis of Lambton Wildlife, Inc. He has conducted a five-year survey on the property and is ecstatic about the diversity and richness of life supported in our chemical-free landscape. Uncommon species and species at risk thrive here. Black Creek, which flows through Fairbank Oil Fields, feeds into the Sydenham River basin, and this basin offers the richest biodiversity in all of Canada. It is comparable only to the Tennessee River Basin in the United States, according to Cornelis. In 2014 Fairbank Oil Fields created a nature trail for the public by following a deer path. It bridges Black Creek, winding through woods, into meadows, and along wetlands. Working oil wells are visible throughout the nature trail, and interpretive signs describe the oil history.

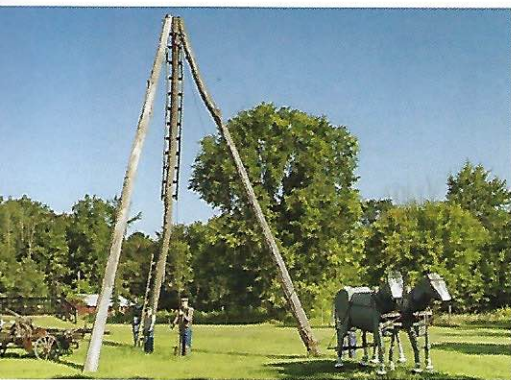


Fig. 9. On the Fairbank Oil Fields driving tour, visitors can envision the past. Life-sized metal sculptures depict oil pioneers maintaining an oil well by employing a team of horses to pull the 400-foot pump out of the well. As the horses pull forward, cables and pulleys at the apex of the three-pole derrick lift out pipes and rods. These components would then be repaired or replaced. Photo courtesy of Tony White.

Gaining Recognition and Protection for the Oil Springs Industrial Site

When the international drillers repeatedly returned to Lambton County, they brought home a wild assortment of exotic artifacts, such as poison-tipped daggers from Madagascar and intricately carved boomerangs from Australia. These artifacts, and the stories associated with them, needed to be shared, and so in 1960 the oil museum was created.

For almost 60 years, the Oil Museum of Canada has been the public face of Fairbank Oil Fields. The museum is on the site of the Williams Well, dug in 1858, and it is adjacent to Fairbank Oil Fields. The museum, operated by the county, focuses on the history that Lambton County oilmen created, as well as their technologies. Researchers frequently access the museum's rich archives.

Partners, such as the museum, are vital. They increase the ability to connect with the public. This recognition brings awareness, support, and media. Together, Fairbank Oil Fields and

the Oil Museum of Canada share information and resources, and they partner on tours of the oil field. Private tours are often arranged for groups such as the Society of Industrial Archaeologists, the Association of Petroleum Geologists, and university programs. Tours for the public also operate with the museum. Summer visitors can hop on a horse-drawn wagon with a museum guide and trot through the woods and fields of Fairbank Oil Fields. Or, they can drive their car along the perimeter with their radio tuned to a narrative. Both tours feature life-sized metal sculptures depicting oil pioneers and horses at work (Fig. 9). Visitors feel a sense of discovery, and this increased recognition is a foundation for protection.

One level of protection for the Oil Springs site has been in place for 93 years. In 1925 two historic wells of Oil Springs were designated as National Historic Sites. One was the Williams Well of 1858; the other was the Shaw Gusher of 1862. Oil Springs asked for the recognition to be extended beyond these two wells to include the many artifacts of the oil museum and the extensive works of Fairbank Oil Fields. Parks Canada studied the sites and in 2005 issued a report with the National Heritage Site designation successfully expanded.¹⁵ Although a National Historic Site designation is only commemorative, in practice it does offer protection from undesirable development.

Recognition is a form of protection, and public recognition of Oil Springs accelerated in 2008 when the Village of Oil Springs celebrated the 150th anniversary of the Williams Well. The celebrations were truly remarkable for such a small village. They ran the entire year and drew diverse players—academics, artists, photographers, speakers, writers, playwrights, community organizers, local heritage and community groups, and the media. An original musical, *Oil Rush*, performed by professional actors, was a massive hit; its 24 performances drew more than 7,000 to the theater in the nearby town of Petrolia. New oil books were launched, and Canada Post

commemorated the anniversary with a new stamp.

That year, two significant conferences on early oil were held in Oil Springs and Petrolia. The symposium of the International Council on Monuments and Sites (ICOMOS) brought Canadian experts with a wealth of international experience. Enthusiasm ran high. Another conference attracted early oil experts from across Canada and the U.S. It was jointly organized by the Petroleum History Institute, based in Pennsylvania, and the Petroleum History Society, based in Alberta.

Conferences have always been building blocks for conservation and preservation. They draw learned people, issue reports, and garner media. These two conferences were particularly important because they were instrumental in obtaining more government involvement.

In 2010 a vital piece of conservation for Oil Springs, *The Oil Heritage Conservation District Plan*, was put in place.¹⁶ It was preceded by the *Oil Heritage Conservation District Study* and is extremely thorough. The plan details the need for protection, the boundaries, the public-participation process, and the political structure for monitoring any potential changes in the oil field. In Ontario these district conservation plans have become vital. They have weight. The county initiated the study, and landscape architect Wendy Shearer headed the consultant team for MHC Planning, Golder Associates, and George Robb Architect.

In other government connections, Oil Springs has also been working with Ontario's Ministry of Tourism, Culture and Sport, as well as with Ontario Trust and National Trust for Canada. These are not new relationships; they have been fostered over decades. Links with professional associations have also been made over the decades, and they have been effective in bending the ear of government and getting issues to the table.

Both the Oil Museum of Canada and Fairbank Oil Fields have long connected with a broad spectrum of the community and beyond. This includes links

with historians, geologists, scientists, industrial archaeologists, naturalists, playwrights, musicians, and even Boy Scouts.

The academics furnish the credibility and foundations for recognition, and many of these connections to academics were also made decades ago. Two theses, written more than 40 years ago, have been exceptional resources for Fairbank Oil Fields: "Petroleum Technology in Ontario during the 1860s" by Norman Roger Ball at the University of Toronto, 1972; and "John Henry Fairbank of Petrolia (1831-1914)" by Edward Phelps for the University of Western Ontario, 1965. More recently, West Virginia University held two field schools at Fairbank Oil Fields.¹⁷ Its industrial-archaeology students and Canadians documented Fairbank Oil Fields, producing Historic American Engineering Record measured drawings of the field wheel, the rig, and the jerker line. They are backed up by large format photographs and a detailed history that links to a broader context of history. Copies were sent to the Special Collections at the Library of Congress and the Library and Archives Canada. The Robert O. Cochrane fellowship was created at the University of Western Ontario's Public History Department. Each year a few graduate students research and report on an aspect of early oil history, and they work for six weeks out of the oil museum. Sometimes academics find Fairbank Oil Fields. University of Toronto graduate students came to study bacteria. They learned that bacteria within plants are digesting oil as an energy source. They are excited about the potential for remediating brown sites.

There is no crystal ball to see into the future of Fairbank Oil Fields. But it is known that its supply of crude is protected because of mistakes made in Victorian times. In those early days, far too many wells were drilled. It was not understood that when the gas pressure was released, the oil would remain in the ground.¹⁸ This vast amount of oil will sustain Fairbank Oil Fields at the current production rate for generations. Yes, Fairbank Oil Fields is the dinosaur

in the modern world and hopes to remain so. This cultural landscape is priceless. Dr. Emory Kemp of West Virginia University recovered from his initial shock of Fairbank Oil, studied it in depth, and concluded: "I believe that the modern petroleum industry can trace its origin to Fairbank Oil and the surrounding oil district. The really important thing is that Fairbank Oil is using mid-century technology on a daily basis. There's nothing like that anywhere."¹⁹

Notes

1. Patricia McGee, *The Story of Fairbank Oil: Four Generations of the Family Producing Oil Longer than Anyone in the World* (Petrolia, Ont.: Word Unlimited Ink, 2004), xvi.
2. Charles Robb, "On the Petroleum Springs of Western Canada," *The Canadian Journal of Industry, Science and Art*, New Series 6, no. 34 (Nov. 1861), 314.
3. Christina Burr, *Canada's Victorian Oil Town, The Transformation of Petrolia from Resource Town into a Victorian Community* (Montreal and Kingston: McGill-Queen's Univ. Press, 2006), 58.
4. Burr, 62.
5. An act to incorporate the International Mining and Manufacturing Company, Statutes of Canada, 1854.
6. J. C. Taché, *Canada at the Universal Exhibition of 1855* (Toronto: John Lovell, 1856), 372, 395.
7. *Sarnia Observer*, Aug. 5, 1858, 2.
8. Alexander Winchell, *Sketches of Creation: A Popular View of Some of the Grand Conclusions of the Sciences in Reference to The History of Matter and Life* (New York: Harper & Brothers Publishers, 1870), 443.
9. Earle Gray, *Ontario's Petroleum Legacy: The Birth, Evolution and Challenges of a Global Industry* (Edmonton, Alb.: Heritage Community Foundation, 2008), 33.
10. *The Canadian Native Oil Company: Its Story, Its Use and Its Profits, with Some Account of a Visit to the Oil Wells* (London: Ashby & Co., 1862), 39-40.
11. Earle Gray, *The Great Canadian Oil Patch, The Petroleum Era from Birth to Peak*, Second Ed. (Edmonton, Alb.: JuneWarren Publishing Ltd., 2005), 52.
12. *Report of the Royal Commission on the Mineral Resources of Ontario and Measures for their Development* (Toronto: Warwick & Sons, 1890), 159.
13. *Report of the Royal Commission*, 160.
14. *Oil Heritage Conservation District Plan* (Wyoming, Ont.: County of Lambton Planning and Development Services Dept., 2010), 20.

15. *Oil Heritage Conservation District Plan*, 9-16.

16. Historic Sites and Monuments Board of Canada, *Submission Report 2005-20, First Commercial Oil Field, Oil Springs, Ontario*, by Arnold E. Roos, Historical Services Branch (Ottawa, Ont., Parks Canada), 1.

17. McGee, 83-85.

18. Gray, *Ontario's Petroleum Legacy*, 30.

19. McGee, xvi.

Charles Fairbank is a fourth-generation oil producer in Oil Springs, Ontario, where in the 1850s, the modern oil industry began in North America. Fairbank Oil began pumping crude oil in 1861, and this oil field still uses nineteenth-century technology. It has been a National Historic Site since 1925. He may be reached at fairbankoil@ciaccess.com.

This essay is derived from the College of Fellows lecture given by Charles Fairbank at the APT and National Trust for Canada 2017 Joint Conference in Ottawa.



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