Manitoba's Coal Rush by Bob Caldwell Deloraine, Manitoba Manitoba History, Number 23, Spring 1992

Deposits of coal in Manitoba are rare and mineable deposits in commercial quantities even more unique. Yet the Turtle Mountains, which straddle the Manitoba-North Dakota border and sprawl over 1000 km2 of otherwise table top prairie, contain beds of lignite coal which have spurred the imagination of many a local entrepreneur who dreamed of profits from an accessible, abundant energy source.



Workers at the Nestibo mine, circa 1933. Source: Archives of Manitoba

Coal mining operations occurred in roughly two eras, 1883-1908, and 1931-1943. However, the coal resource was created millions of years ago. In what is called the Palaeocene Epoch, about 65 million years ago, conditions existed that were favourable to the formation of lignite coal. A large mid-American sea covered much of the area of southwestern Manitoba. It was fed by a river flowing from the Precambrian Shield. When the river emptied into the sea to form a vast delta on the present day site of the Turtle Mountains, large plants grew in the swamp like environment, and as the plants died, they formed layers on the basin bottom. This plant matter was eventually transformed into peat and in time became buried under additional river sediment. These sediments after many years were turned into sandstone and shale and this pressure in turn transformed the underlying peat into a low grade lignite coal. In the Turtle Mountains, the lignite is found in seams which vary in thickness from a few centimetres up to two meters. Often the seams are separated by layers of "fine clay," which indicate different coal forming swamps developing over existing ones, with each new swamp producing its own layer of coal. It was these thin layers of geological history that attracted the attention of the first Manitoba miners.

Evidently, discovery of the coal was accidental. The first discovery followed on the heels of the first settlers who, after following the Boundary Commission Trail to the eastern edge of the Turtle Mountains, began searching for a reliable supply of good water. While drilling for water, a settler near Boissevain brought up a coal core; such a discovery on the edge of a flat treeless prairie must have inspired the imagination of many people.

The first reported attempt at commercial mining occurred on the western slope of the Turtle Mountains only a few miles from the newly marked Canada-United States border. Near the small postal outlet of Lennox, coal was mined and sold for the first time in Manitoba history—the year 1883, the cost, \$2.00 per ton. Other small scale mines followed suit—all on the western edge of the mountain and in depressions or creek beds to avoid tunnelling through too much overburden to extract the coal.

The Voden mine is a good example of these early operations. Mr. Voden hired a small crew and began mining on his homestead land. He constructed a vertical cribbed shaft 12 meters deep and about 24 meters square. From this main shaft, men tunnelled outward to access the coal seams. Coal was extracted by pick and shovel, loaded onto small cars and hauled to the surface by a cable powered by a farm engine. Activity continued for three years (1885-1887) until disaster struck. A lunch hour cave-in collapsed the main shaft and buried the pump which drained the water that continually dripped into the shaft. Miraculously no one was injured, but the accident did spell the end of Voden's operation.

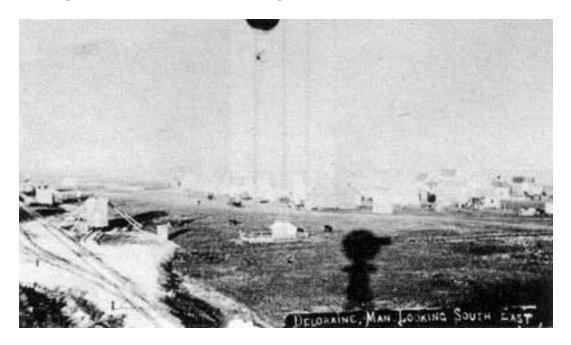
Such an experience did not, however, deter the spirit or imagination of others. In fact, right on the heels of this unfortunate turn of events arose the most grandiose scheme of the time—that of the Manitoba Coal Company. Optimism and excitement were the catch words of the day! Killarney resident Mr. David Hyssop reported good seams of coal in the area of the old Voden mine and the local newspaper The Deloraine Times, January 17, 1889, reflected the anticipation of the community.

Hurrah! Cheap Coal.

The coal deposits have been examined by one of the very best experts, who says they have any quantity of coal, of a quality superior to any hitherto mined in the great Northwest and which may be got at very little expense. Coal of superior heating power was found at a depth of 21 feet. It is intended to put into operation a complete outfit of mining tools and machinery in the spring, but in the mean-time coal will be taken out with a small staff of men and will be placed on the Deloraine market, perhaps in the course of four or five weeks and citizens will then have practical proof. The price will be \$5.00 to \$6.00 per ton, but as soon as the regular outfit gets to work it is said the company will be able to place coal in Deloraine at about \$3.00 to \$4.00 per ton. The coal is being got in 13-1-24 but it is reported to be all around and the company is acquiring other lands in the neighbourhood. A railway from the mines to Deloraine and then Brandon is talked of in connection with the mine.

Soon a joint stock company was formed with the interest of extensive mining in the area. Stocks sold for \$100.00 each in 1889 and the company purchased 810 hectares of land at the proposed site. Unlike the Lennox and Voden mines which supplied only local markets, this operation also

looked to supply large urban markets such as Winnipeg. With this intent, the Manitoba Coal Company applied for a railway charter to link the coal fields with the main line. By November 1890, Ottawa had authorized a land grant to finance the construction of the Brandon and South Western Railway Company between Deloraine and the coal fields. In anticipation of this connection, a main shaft had been opened and at 13 feet below the surface a good 1.5 meter seam of coal was encountered. A second seam one meter thick was separated from the first by a thin layer of fire clay. The company utilized a steam powered pump to extract water and to power a lift cable to haul coal up the main shaft to the surface.



Deloraine, Manitoba, circa 1890. Source: Archives of Manitoba

However, the plans of an economic boom did not materialize. The mine sporadically produced coal between 1888 and 1892, but the key to its success—the railway link—was never built. Probably the reason is that the C.P.R. had extended a branch of their railway to the southern Saskatchewan coal field near Roche Percee. This readily available coal seems to have spelled the end of the Manitoba Coal Company; not only did this link supply Winnipeg with coal, but it allowed Saskatchewan lignite to compete with Turtle Mountain coal on the local market. The C.P.R. did not need two supplies of coal and the visions of an energy based industry in the Goodlands area came to an abrupt end.

Closer to Deloraine, local farmer Duncan McArthur engineered an ambitious plan to supply fuel to surrounding communities. The Deloraine Times reported:

The McArthur coal mine is another factor; coal of a quality at least better than Estevan coal is being got out and finds sale in the locality. Duncan was a little late getting out the coal for this season's market but has plenty at the pit's mouth now we understand, where it can be bought very cheap. The hotels in Deloraine and other places are burning the coal and speak well of it especially for furnaces.

The mine situated on the Forbes Muir farm about eleven kilometres south and east of Deloraine, was a vertical shaft similar to other operations, measuring seven meters from the ravine floor to the main seam of coal. Mining continued here between 1892-1908, producing a substantial amount of coal from the three buried seams. However, problems that seemed to plague all underground mines in the area—water seepage and unstable roof conditions—caused operations to cease.

This operation was typical of the era 1882-1908—small scale operations that supplied a local market with an alternative, cheap energy source, with limited profits. Dreams and visions far surpassed actual success. The newspapers' boast of "Diamonds Galore in Turtle Mountains" and "Millions of Tons of Coal Near Deloraine" may have been true, but getting these "black diamonds" out of the ground was no easy task. Production on a large scale would have to wait for an unlikely set of circumstances to awaken the slumbering coal industry. This was the Great Depression. In 1857, John Palliser had described the area of southwestern Manitoba as a vast treeless plain and predicted agriculture in the area would be unadvisable. In the 1930s his prediction seemed prophetic. But while the economic depression of 1930s dealt a death blow to many Canadian industries, its effects were virtually the opposite on the local coal industry. The very conditions that devastated the average community—severe drought, a collapsed stock market, and low grain and livestock prices—again made coal mining plausible. People needed work and the community wanted a cheap, efficient fuel. Thus the small town farmer became a make shift coal miner in an effort to fight the effects of an economic depression.

As in the earlier mining era, several people envisioned coal mining as an opportunity for prosperity. Many mines operated in the Deloraine—Goodlands area in the era 1931-1943 with mixed results.

The ill-fated Deloraine Coal Company was incorporated in October, 1931, and soon hired fourteen men to sink a tunnel near the former Duncan McArthur mine. This activity prompted a visit from Manitoba Premier Bracken and a representative from the Department of Mines and Natural Resources. Visions of an alternative to an agricultural economy and a cheap source of fuel for Winnipeg seemed to excite the whole province. Work progressed and a main shaft was drafted into the ravine bank for over 25 meters. Coal was struck about 3.5 meters below the ravine bed. Little coal was taken and other attempts were made to access the coal, but due to unstable roof conditions and continual cave-ins, the site was abandoned.



Tunnel head in the Deloraine Coal Company's ill-fated mine of the Depression years. Source: National Archives of Canada

The disappointed owners of the Company sold the operations to Mr. J. Carruthers who re-opened the site and changed the name in 1932 to the Turtle Mountain Coal Mines. After very limited success, the equipment was moved to a new site on the Hainsworth farm. The plan was to relocate the main coal seam that Duncan McArthur had tapped for years. Locals were hired to dig the new tunnel, but due to water seepage and the anticipated cost of new equipment, the project was abandoned. Tom Hainsworth explained:

"We worked our way down 275 feet (at an angle of about 25 degrees) and found several small seams of coal and at 275 feet we drilled down 19 feet and went through an eight foot seam of very good coal. A water problem was developing and new equipment was going to amount to a considerable amount of money—around \$2000.00 which was considerable in those days.

(T)he syndicate that was supposed to be financing this project had already failed to put more money into the project before this and finally backed out of the deal, so the project closed and the machinery and equipment was shipped back to Brandon and the writer was out of pocket; several of us had a real experience working for nothing but it was real muscle-building! Some of us look back and talk about the 'would-be' coal mine.

Miner Valere Andries agreed —"All I ever got paid was my tobacco."

This ended coal mining in the immediate vicinity of Deloraine. However, on the western slopes of the Turtle Mountains south of Goodlands, another coal rush began when several mines sprung up to tap the rich resource.

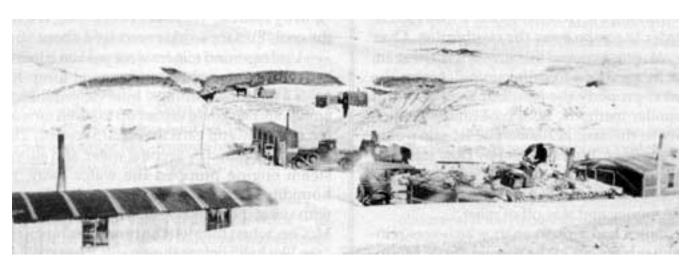
In a ravine near the Murray Cavers farm two small scale mines began operation. The first, the McCleod or aptly named Deep Rivine Mine, operated from 1931-1933. The small crew tunneled into the creek bed using a drift mine of one foot to three feet; that is, for every foot the tunnel sunk vertically it was driven three feet further into the ravine. Coal was produced in the winter months when the demand was greatest. Mining methods were primitive, workers' tools were simple picks and shovels, and coal was loaded onto home made cars and hauled to the surface by horses. Locals brought teams and wagons to pick up the coal. Over 100 tonnes of coal were produced from the different drift and the one shaft mine on the site, but unstable conditions and water problems forced a shut down of the mine; the labour needed to make the mine safe was simply not worth the effort. Immediately adjacent to this mine was the Powne Mine which operated during 1933-1934. This mine produced a small amount of coal which was hand winched up the mine shaft to the surface. Water problems in the mine brought about an end to operation.

The largest producing mines of the era were the Henderson and Salter mines—ironically the two mines which produced over 95% of Manitoba's coal were located only a stones throw apart, separated only by a strong barbed wire fence! Coal was discovered on Mr. Henderson's farm when a water well was being sunk. Mr. Henderson had just recently lost his barn and granary in a fire and the thought of an alternative source of income must have appealed to him. Mr. John Nestibo was hired and put in charge of operations in October of 1931. He began mining and selling coal at the site for \$2.00 a ton which was considerably cheaper than the rival coal from Saskatchewan. Nestibo used horses and cutters to strip off the overburden and expose the coal which was picked, sorted and then stored from the elements in roughly built shelters. Estimated produce was about 25 tonnes per day.

In 1931, Nestibo's crew also tunneled two drift mines into the west bank of the ravine where they encountered two good seams of coal with a layer of fire clay between then. While the technical operations went well, the relationship between Mr. Nestibo and Mr. Henderson faltered. Mr. Henderson wanted more royalties from the operations. Mr. Nestibo refused and simply hopped the fence and started mining on Mr. Salter's land. Mr. George Cain from Melita was hired to replace the Nestibo crew and thus began the two rival operations, side by side on the open prairie.



Workers at the Nestibo coal mine, circa 1933. Source: Archives of Manitoba



A 1933 photograph depicting the George Cain coal mine at left and across the fence the Nestibo mine. Source: Archives of Manitoba

Cain began working the Henderson site with a Holt 20 Caterpillar in order to scrape away the overburden. Over 1000 Tonnes of coal were removed this way, but as the seam became thinner he switched to drift mining. Across the fence on the Salter property the Nestibos were also drift

mining using similar methods. Both coal camps applied prairie ingenuity to the task at hand. The labour would make a union boss cringe. But as miner Ray Dow stated "it was a matter of survival. We had to do something and did what we had to do to make a dime" Stu Pool agreed "we did it to make a little money and stay off of relief."

These drift mines had a main shaft which was reinforced with popular trees cut in the nearby Turtle Mountains. Timber was felled in the bush, brought to the mine and sawed into proper lengths; men who hauled the timber were paid around a dollar a day. From the main shaft, miners—often as partners—would tunnel side shafts to encounter the two mineable coal seams. The bottom seam on the average was one to two meters thick topped by a layer of fire clay one-third of a meter thick, which in turn was topped by a second thin lignite seam. Mine tunnels were usually only the height of two coal seams, often only one and one-half meters high which made working conditions very cramped. Valere Andries stated "when you went in you were stooped, when you came out you were stooped" Miners soon learned the easiest way to extract the coal. It was described by Rene Dobbelaere:

... you picked out the clay first, so then the top layer of the coal drops down on top of the bottom seam. Sometimes you cannot bar or pick it (the clay), so you have to blast it out with dynamite or what you call black powder.

"Shorty" McKillop, who was put in charge of training new recruits, describes these conditions:

... a shaft 9 feet wide and up to 300 feet long with a four to one incline and average headroom. Off of the main drift side drifts were pushed every 30 feet. The side drifts were about 8 feet wide to start and at about 20 feet in they widened out to about 16 or 18 feet. When the fire clay was out they could use the space to throw more fire clay as they dug in and widened out more. This eliminated the need to haul out any more of the clay. Cars were pushed to the main shaft on a track the miner had to construct himself and then spun a quarter of a turn to meet the main track on a turntable constructed to the one on top of the main ramp where the cars were unloaded.

Coal was collected and loaded onto shallow wooden cars which would haul about one-half ton of coal each. The wheels were binder wheels. They, ran on two-by-four poplar tracks which often needed replacing. In Cain's mine a Shetland pony was initially used to drag cars to the surface, but eventually both operations installed steam powered engines to pull the cars to the top with a thick steel cable, as well as to provide power to light the main shaft. To identify who filled the car, miners placed a numbered washer on the load. At the surface, the coal was graded and dumped into the appropriate storage bin; customers would then drive their truck or wagon under the chute and be "gravity loaded;" therefore eliminating the need to shovel the coal.

Surface workers received about 60 cents a day. Underground miners were paid on commission, usually seventy-five cents a ton for good lump coal—about 10 cents a ton for screenings. Interviewed miners claimed an ambitious pair could extract up to seven tons on a very good ten hour day and earn their \$2.75 reward. Their work was always hampered by seeping water, and although the main steam engine pumped the water away, the heat and humidity made conditions miserable. Miners were soaked with sweat minutes after starting to work.

According to Bob McGee, when they left the tunnel for lunch or supper they "ran like hell" before their pants froze stiff. And the bunk house offered only partial relief. The makeshift shelters were little more than tar paper shacks or old railway cars, McGee said they "never stopped the wind, (they) just slowed it down a bit."

Working conditions were cramped and dangerous; Ted Nestibo described the mine as "kind of like a frozen death." Rene Dobbelaere recalled the lights blinking three times as a warning to clear tunnels just minutes before two feet of water came cascading into the mine through a ventilation shaft as a result of spring thaw. Amazingly no one was ever killed, but accidents did happen.

Evelyn Cavers describes a few incidents:

Conditions down under were not conducive to safety. The carbide lamps on miner's caps often flickered out for want of oxygen. The electric wiring often "shocked" the men if they accidentally touched a live wire underground. Lighting was inadequate and the clay roof soaked with seepage water always threatened to come down and bury the men alive. Ted my brother, who was 15 at the time was digging coal with Bill Skene at the far end of a tunnel, when the roof cracked and the men jumped back just as it gave way. Ted jumped clear but Bill was pinned from his pelvis down by tons of clay. After digging him free with the help of Rene Dobbelaere and Hypaullit Billaert, they carried him up and laid him on an empty coal car and hauled him out of the mine more dead than alive, then loaded him on the back of George Cain's half-ton for the trip to the hospital. He recovered during the summer and the next season went to work in the mine across the fence, where he met with another near-fatal accident: Two runaway cars came roaring down the incline and knocked Bill down into the sludge pit. He recovered from this mishap also.

There simply was not the money for safety precautions so everyone fended for themselves. One man worked half a day and quit; a miner claimed "I've never seen a man so scared in my life"

The miners were not the only ones working hard; a crew of enterprising women—some of them hired but most of them family members—provided the needed support staff. There were hungry men to feed. Every week the Nestibo crew consumed up to 200 loaves of locally purchased bread plus a half a beef, and they ate up to twelve pies a day. Mrs. Nestibo and daughters and Mrs. Cain were cooks, seamstresses, launderers, and willing nurses patching up an unexperienced crew of miners.

Days were long, busy and eventful. Mrs. Cavers describes the Nestibo site:

After the work on the farm was rounded up in the fall we'd move to the mine — we lived in a one-room log cabin there the first two years — and back to the farm in the spring. The mine took on the look of a busy small town, with living quarters for our family, the cook, housing for married men — usually covered boxcars — a large bunkhouse for the single men, cookhouse and dining hall, dynamite house, barn for the horses and one or two cows and a huge shed that housed the steam engine.

Although miners do not seem to miss the work—as one of them said, "that's all the good old days I want to see"—everyone spoke highly of the comraderie. The sing-songs and the "coal miners' band;' about which the miners stated "the Grand Ole Opry couldn't do any better than what our group could;' kept people entertained. There was also the satisfaction of earning an income to help their families through the hard times. Trucks were often loaded up on a Saturday night for a cruise into Deloraine or local parties were "livened up" when moonshine arrived in ketchup bottles from home stills in the Turtle Mountains. Mr. Nestibo disapproved of the liquor, but workers were hard to come by. Perhaps, to some, the liquor helped suppress the fear and drudgery of mine labour.

Managers of the operations also had to market their product. Coal from other sources often burned better than local lignite, so Mr. Nestibo and Cain appealed to the public to buy their lower priced product. In the March 8, 1933 Deloraine Times, John Nestibo ran the following advertisement:

Support local industry by buying Turtle Mountain Coal. Save money on fuel and keep your money circulating in the district. Plenty of good coal on hand at the Salter mine and orders left with any truck driver in town will receive prompt attention. John Nestibo.

Mr. Cain in January of 1934 activated a similar philosophy:

BUY COAL FROM THE HENDERSON MINE ...

Do you realize you are buying coal at low prices in this town because it is being mined here and the large quantity purchased by local buyers makes it possible to sell at such low prices? Do you realize that our local mines in these hard times provide work for approximately 35 persons besides giving employment to our local truck drivers and their employees?

You will have noticed certain advertisements indicating low prices of coal which may be shipped in from outside points. These prices are obtainable because the local mines are giving you coal at low prices and forcing other dealers to reduce their prices. You are buying your coal at least \$2.00 cheaper per ton than would be the case were our local mines not operating.

If this employment is being given and this saving being effected through the efforts of our local mines should you not indicate your appreciation by giving them your entire support? The quality of the Henderson coal is improving, it is being mined from a dry seam, and starting this week you may obtain coal at the Henderson Mine at the remarkable low rate of \$2.40 per ton at the Mir Henderson Coal Mine George Cain, Operator.

Some gave the local lignite the label "Turtle Mountain mud." Others used it without complaint. Whether local people used it or not, they benefited from the competition.

These two mines operated every winter until the depression began to ease and World War II broke out in Europe. This spelled the end of Manitoba's commercial coal mining. Farmers returned to their fields and the more adventurous headed for the battlefields overseas. Stu Poole stated that when the "economy picked up you couldn't get men to work in a place like that."

Labour shortages therefore closed the mines. Nestibo's shut down in 1938 and Cain ceased operations in 1939.

Attempts were made to operate the mines after 1939. The Goodlands Coal Company produced some coal between 1939 and 1943 under the management of Mr. H. Kishnerus of Bienfait, Saskatchewan. However, the lack of available workers finally forced him to shut down in 1943. Just as depressed agricultural condition initiated the coal rush, so too did a return to agricultural prosperity seal its fate.

There is still a tremendous amount of coal in the Turtle Mountains, virtually millions of tonnes. Tests have been conducted as recently as the 1970s to determine its value. However a government report stated "the lignite seams at Turtle Mountains are too thin and the roof and water conditions too dangerous to allow economic extraction of the lignite by underground mining."

What remains of the mine sites are a scattered collection of coal mining relics, piles of screening, and unmarked tunnels. But the stories are not lost. The Turtle Mountain Souris River Historical Society has worked hard to preserve this chapter in our history. Two coal cars, one from the Nestibo mine and one from the Hainsworth mine, are now proudly displayed in the downtown park in Deloraine, where the town council erected a commemorative plaque. On June 28, 1988 a reunion of miners was held to dedicate the coal cars in their honour. On Highway 21, near the site of the Deep Ravine and Powne Mines, is a marker placed by the Historic Resource Branch of the Manitoba government denoting the unique significance of the mines in the history of Manitoba.

Author's Note: A number of sources were consulted in preparing this paper. Among them were

D. Doerksen's The Saga of Turtle Mountain Coal; Coal Mining in Manitoba, and publication of the Manitoba Historic Resources Branch;
Lignite in Manitoba, prepared by Manitoba's Department of Energy and Mines; and tape recordings of interviews with miners carried out by members of a local history class at Deloraine Collegiate.