

Lardeau Valley Museum

Steam Donkey Interpretation Panels

Publishers Note: (March 1 2021)

The Forest History Association of BC is pleased to re-publish the interpretive panels prepared for the Lardeau Valley Historical Society for their steam donkey project, which originally were made public on the Facebook page of the [Lardeau Valley Historical Society](#).

These panels appear on pages 3-5 below. You will have to “zoom in” on your .pdf viewer to read the small font in these pages.

The top third of the next page is the entry which appears on page 12 of Issue 109, FHABC Newsletter dated March 1, 2021.

All images and text of the panels in the following pages are owned by and copyright of the Lardeau Valley Historical Society.

We congratulate and thank all those involved with the donkey project, and look forward to reporting updates to the project as it proceeds.

Dave Florence
Newsletter Editor
<http://www.fhabc.org>



Lardeau Valley Steam Donkey Interpretation Panels

By Dave Florence, Newsletter Editor, with inputs and permission from the Lardeau Valley Historical Society

We've been following the story of the repatriation of a steam donkey on the Facebook page of the [Lardeau Valley Historical Society](#), located south of the Duncan Dam in the Kootenays. In December 2020, they published five interpretation panels that provide an outstanding record of their donkey's history and donkeys in general. The panels will be installed beside the steam donkey next year when it gets

assembled. Their donkey has a fascinating history: purchased for use in Meadow Creek in the 1920s, used for decades, sitting idle for decades, moved to a museum in Alberta for 57 years, and then repatriated to the Lardeau Valley in 2020. Read the panels to get the whole story here [\[link TBA\]](#).



The poster below announced the event that celebrated the donkey coming home in 2020. Photos to the right taken in 2020 and posted on the web-site.

Lardeau Valley Historical Society's AGM presents:

Our *Steam Donkey's*
Homecoming to

Meadow Creek

by

Art Carson

Immediately before the Lardeau Valley Fall Fair:
Sunday, September 27, 2020, at 10 AM
Lardeau Valley Community Hall

Following our brief AGM, Art Carson will review the history of our Steam Donkey which, after years of dogged effort, has been finally returned to us from the Reynolds-Alberta Museum. Art, a passionate history buff, is the grandson of Frank Carson who pioneered land in Meadow Creek and who was co-owner of this amazing steam engine.

— Please follow Covid-safe practices —

- * 50 chairs will be spaced 2 meters apart
- * face masks strongly advised
- * socializing to be done outdoors only



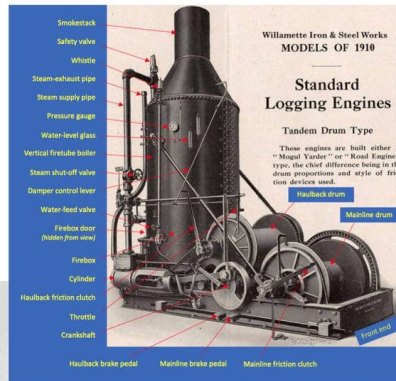
What is a Double-drum Donkey Engine?

A donkey engine is a machine that took over work previously done by donkeys (and oxen and horses). Essentially, it consists of a boiler that creates pressurized steam that, in turn, powers 2 cylinders which turn a crankshaft connected to one or more drums (winches) to wind or release the working end of one or more cables. A double-drum setup supported use of very long (and thus very heavy!) cables. The mainline drum was capable of holding over 3000 ft (almost 1 km) of 7/8-inch cable. To unreel such heavy cable, the haulback drum was fitted with a lighter-weight cable that, looped around one or more distantly anchored pulleys, was able to draw the mainline cable off its drum toward whatever heavy object (e.g. a drag of logs) needed to be brought toward the donkey. The entire machine was commonly mounted on massive timber skids so that it could also pull itself across rough terrain.

The Boiler's Special Design

Although the winches do the work, the boiler provides the essential steam power. It works on the same principle as does a kitchen pressure cooker. Although the boiler appears as a single, tall cylinder of riveted steel, internally it is divided into distinct components: the wood-burning furnace (or "firebox", for creating heat); the ash pit below this; the 104 open-ended firetubes that pass from the furnace ceiling up through the boiler's water tank to rapidly and efficiently transfer enough heat to the water to create a head of pressurized steam; the smokebox where the exhaust flowing through the firetubes collects; and, the smokestack.

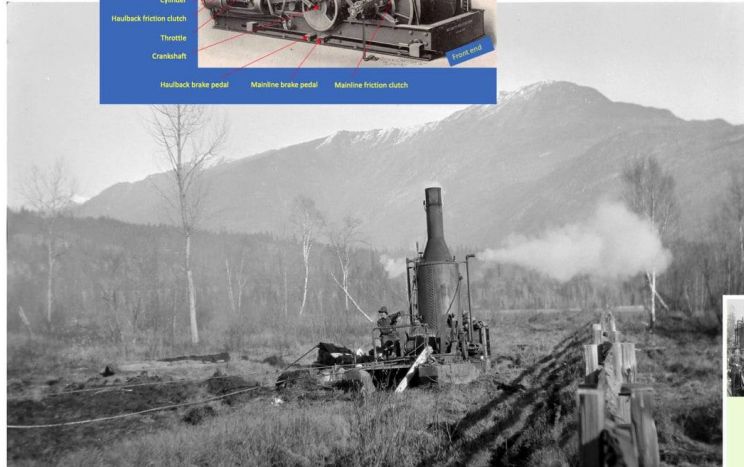
Steam engines, operating under high pressure of steam trapped in a large boiler, were known to be dangerous; they required government inspection every year to ensure that the boiler's rivets and seams were trustworthy. This engine proved up to the task.



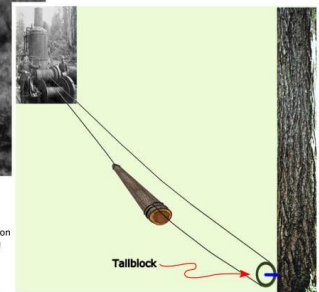
Putting the Donkey to Work

Although donkey engines were designed primarily for the timber-harvest industry, they readily lent themselves to other applications such as digging trenches. At least two people were required to operate the donkey engine efficiently: a "donkey puncher" (operator) and a "fireman." However, in more complex operations such as skidding sawlogs from a forest, additional workers hauled water and firewood, and assisted at the far end of the cable. The fireman stood on the "fireman's platform", situated between the firewood bin and the firebox, and continuously added firewood to the flames. The donkey puncher stood on the "operator's platform" where the levers and pedals are clustered—a throttle as well as a clutch and brake for each drum. The brakes served to keep a bit of tension on whichever line was unspooling while the other line was reeling in. The potential problem of communicating with distant crew members was resolved by using a code of whistle blasts. For the relatively simple task of digging ditches, Frank and his son Dave probably managed without additional help.

To dig a ditch, the mainline cable was fixed to the leading end of a large cottonwood log, and the haulback cable to the log's opposite end. At the far end of the setup, a stout tree or a "deadman" (a large, buried object such as a log) served to anchor a very strong pulley (known as a "tailblock") through which the haulback cable was looped. Thus, while the mainline cable reeled the log in toward the donkey, the haulback drum let its line unreel—the entire setup operating somewhat like a clothesline as illustrated below. To dig the ditch, the engineer caused the log to be dragged back & forth, back & forth until, at last, the ditch was determined to be deep enough.



Above: Dave Carson trenching a ditch on the Meadow Creek flats, circa 1926; Mount Lavina in background. (LVHS Art Carson Collection).



Right: Illustration of ditch digging setup.

No Wheels? No Problem!

The donkey moved itself in the same manner that a modern 4x4 winch cable, if looped around a tree, might pull its vehicle out of a mud hole. The main cable was simply attached to a tree or other fixture conveniently located in the direction of desired travel, the engine started, and the massive machine, bolted firmly to its wooden skids, slowly sledged itself toward the tree.

Panel © Copyright Lardeau Valley Historical Society. All rights reserved.

Frank Carson Hears of Meadow Creek

Frank Carson was a fourth-generation Ontarian with prominent Irish ancestry. His wife, Catherine (Kate), hailed from Thessalon, Ontario where her father, Dave Gordon, was woods boss for a logging operation. Frank and Kate tried farming first near Killam, Alberta, and then purchased an acreage in Wealthwood, Minnesota. Here they happened to meet Herbert Gage who, unable to make his property tax payments on a 360-acre tract of land he owned in Meadow Creek, drew Frank's attention to it. When Herbert showed Frank a 1919 letter signed by Kaslo's A. W. McQueen, Provincial Assessor and Collector, Frank jumped at the opportunity. McQueen exalted the land as being a farmer's dream.



A short ride home from Marblehead in back of Frank Carson's Model-T Ford truck, 1926. L-R: Dave Carson, Jim Carson, Mr. Nelson, Kaye Carson, Mrs. Morel, Ernie Morel, Kate Carson, Ralph Carson, Frank Carson. (LVHS, Art Carson Collection).

House Building and Other Work

When they arrived here, they built the house (photo at top) in which they lived until around 1932. This house was situated approximately 25 yards south of Roy & Jane Lake's last trailer home—the site that became Roy's vegetable garden. They settled into their subsistence farming routines—raising cattle, making hay, growing fruit and vegetables. To sustain his family, Frank, as did most early residents, was able to make a living by taking on whatever jobs were available in addition to working his own land. Upon his death in June, 1936, his son Ralph inherited the Meadow Creek property which included his father's share in the donkey engine.

Unlike his father, Ralph was not interested in farming. Instead, he earned his living by various occupations, starting off as fireman at the Marblehead Quarry where his brother Dave also worked. By the late 1920s Ralph was packing supplies to mines by horse or even on his own back, often in the company of Jim Brandon of Gerrard with whom he developed a lifelong friendship. Experience as a trained auto mechanic in Chilliwack in the late 1920s and as a welder in North Vancouver during World War II served Ralph well later on. Postwar self-employment in the wilderness, such as his supply boat for loggers and miners on the Duncan River and his trapline up Healy Creek, was set aside when he became a family man. After partnering for a time with Ken Bowles in a small sawmill, Ralph went to work for Kootenay Forest Products at their Marblehead maintenance shop. In 1962 at the urging of Jim Brandon, Ralph, Winnie and their two young teenagers, Gordon and Art, moved to Jim's adopted home town of Sooke, BC, where education and work prospects were better. Ralph retired in the 1970s, and he and Winnie spent the rest of their days in Sooke.



Frank & Kate Carson's first home at Meadow Creek, February, 1924. They cleared the stumps within the next few years. The house burnt down in the 1940s during an accidental grass fire. (LVHS, Art Carson Collection).

A Land Swap and Road Trip

Herbert and Frank agreed to swap their respective properties on condition that Frank also pay the 3 years of taxes owing on the larger Meadow Creek tract. Thus, Frank and Kate, with their 3 sons and 2 daughters, moved to Meadow Creek in 1923. Frank drove from Minnesota to Meadow Creek in his Ford model-T truck and, likely, also shipped some family possessions up by rail.



Members of the Carson family and neighbours haying on the flats, 1926. (LVHS, Art Carson Collection).

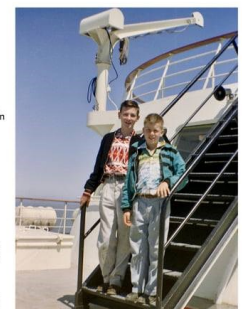
Local Descendants

Sadly, the original house that Frank Carson built burnt down. Before Ralph & Winnie left the area, they and their sons, Gordon and Art, last lived in a house they pieced together on the site where, later, Ed and Irma Funk built the house in which Garth Leyshon now lives. This house initially was a cookhouse that Ralph skidded from Fifteen Mile, and, as evident in the below photo, that he later added to. Both Gordon and Art eventually moved to Valemount, BC.



1958 photo of the house that Ralph & Winnie Carson built. The outline of the original 1940s logging-camp cookhouse is clearly visible; the rest was added later. (LVHS, Art Carson Collection).

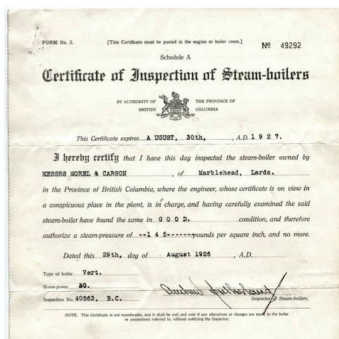
Art and Gordon Carson, 1960, en route to Tsawassen. (Winnie Carson photo, Art Carson Collection).



Panel © Copyright Lardeau Valley Historical Society. All rights reserved.

A Ditching Machine Got Ditched?

Although the Provincial Assessor and Collector had highly praised the flats for farming, not long after arriving on his 360-acre Meadow Creek land Frank Carson felt reality set in. The soil, being near water-logged most of the year, produced far more sedge and sphagnum than quality hay. Clearly, miles of drainage ditches needed to be trenched; but not by hand. The inventive Frank Carson and his eldest son, Dave, first tried to dig ditches with horse-drawn wagon upon which he mounted a large wheel with loops of heavy, flailing chains attached to it. It was proudly dubbed "Dave's Ditching Machine". However, when its promise proved larger than its effectiveness the purchase of a costly steam donkey had increasing allure. Frank and Ernie Morel of nearby Marblehead agreed, by a hand-shake partnership in 1925, to purchase the steam donkey which, although built in 1907, had sat idle for about 10 years. Ernie was a valuable partner considering that, as Caretaker at the Marblehead Quarry which owned 2 steam engines, he was familiar with steam-engine mechanics and operations. It was registered to them in 1926. The 14-ton machine was shipped on a railway flatcar.



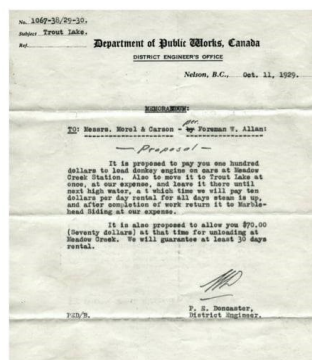
The Donkey Gets Around

Not only did Frank and Ernie employ this donkey to dig ditches, but it was also hired out for other jobs. For example, the Federal Government used it extensively at Gerrard for hauling escaped cut-logs out of the lake as these drifted toward, and threatened, the hatchery operations there. In this case, the setup was not simply to pull the logs toward shore, but also to lift them out of the water and pile them onshore in much the same manner as a "yarder" serves the forest-harvest industry today (see photo below). The donkey's haulback cable was looped around a pulley mounted high up on a rooted tree or on a pair of securely fixed poles, and the business end of the cable cinched around whatever wood lay in the water to be hauled in and piled.

Left: 1926 Inspection Certificate qualifying Frank Carson's donkey engine for safe operation. (LVHS Art Carson Collection).



Above: The horses and wagon setup for "Dave's Ditching Machine" parked in front of Frank & Kate's Meadow Creek house, circa 1926. (LVHS Art Carson Collection).



Above: 1929 Federal Government request to hire Frank & Ernie's donkey engine for use at the Gerrard Hatchery operation. (LVHS Art Carson Collection).

The Steam Era Loses Steam

Frank & Ernie's donkey engine was built in 1907 by Vancouver Engineering Works Ltd., a company that manufactured not only its own designs but also some others under license from Willamette Iron and Steel Works of Portland, Oregon. Perhaps, with internal-combustion engines already inching their way toward mainstream use, Frank and Ernie got theirs for a reduced price. The donkey sat idle on the flats from about 1929 to 1963 when it was hauled to Wetaskiwin, Alberta.



Left: Illustrating how a donkey engine could be rigged, using poles, cables and pulleys, to lift and pile logs. (Courtesy of Roger Titus, McLeod Post Card Collection).



(Courtesy Burnaby Village Museum collection)

Panel © Copyright Lardeau Valley Historical Society. All rights reserved.

Donkey Lassoed by Far-off Museum

Ernest Victor Morel passed away July 24, 1940, leaving behind his widow, Caroline. Frank Carson passed away June 14, 1936, and willed the Meadow Creek farm to his son Ralph. In the early summer of 1962, someone representing Stan Reynolds—an aggressive and determined Alberta-based collector of old autos and steam engines—visited Ralph and encouraged him to sell to the Pioneer museum the old steam donkey that was still located on the flats where it had last been used decades earlier. Ralph declined the offer. Not long after, late-1962, Ralph moved his family to Sooke for more stable employment income, although he kept ownership of the farm and rented their house to Dick Neufeld & family. The irrepressible Stan Reynolds, supported by a team of lawyers, soon had a legal deed of gift drawn up to present to Ernie's 101-yr-old widow who then lived in Mount Saint Francis Care Home, in Nelson. When she signed her approval, she likely was unaware that this document also stated that she identified herself as the donkey's sole owner.

Frank Abey, a dear friend and neighbour of the Carson family resided at that time in the house that Selkirk Skiing eventually purchased. Without knowing what had transpired from Ralph's point of view, Frank Abey had no reason to doubt the legal team's assurance that the donkey had been sold to the Pioneer museum and, therefore, was happy to accept whatever the legal team paid him to haul the donkey from its location on the flats to the side of Meadow Creek Road (on what today is Selkirk's meadow) ready for hauling to Wetaskiwin. This he did, using a bulldozer. In large letters, a message was painted on the boiler which read: "Property of Pioneer Museum".

On June 30, 1963, when Ralph brought his family back to Meadow Creek for their summer vacation, he was shocked, upon arrival, to see the donkey parked where it was along the road near their home. Art Carson recalls from his personal diary, "Dad subsequently phoned Frank Abey who immediately drove over to our house and engaged in a startling and at times very emotional conversation with Dad about his part in it, and about his (Frank's) terrible fear of Stan Reynolds' legal manoeuvring." Convinced that they both faced a costly legal battle over a mass of rusty iron, Ralph agreed to let the matter drop. The donkey was hauled to the Pioneer Museum in Wetaskiwin, Alberta, in late summer of 1963. The Pioneer Museum was subsequently renamed The Reynolds-Alberta Museum (RAM).



Former Meadow Creek resident Rein Bonsma heroically hauled first the boiler, and then the massive winch, from the Reynolds-Alberta Museum in Wetaskiwin back to the Lardeau Valley Museum. (Peter Jonker photo).

Right: George Brinkman and Art Carson inspect the donkey winch upon its return to Meadow Creek, summer 2020. (Peter Jonker photo).



Donkey Returns Home

In 2016, encouraged by Art Carson who had meticulously kept historical records that were passed on from his grandpa Frank, the Lardeau Valley Historical Society (LVHS) formally requested the RAM Board of Directors to return the steam donkey to Meadow Creek from where it was taken by means of apparent deception. Although the RAM Board initially turned down LVHS's request, a subsequent request (including additional evidence) was finally approved in 2020.

Thanks to Columbia Basin Trust, to the Rural District of Central Kootenay, and to the hugely-appreciated transportation efforts of George Brinkman and Rein Bonsma, the donkey made it home again after being in Wetaskiwin for 57 years.

Panel © Copyright Lardeau Valley Historical Society. All rights reserved.

Ernest Victor Morel

It made good sense for Frank Carson to partner with Ernie Morel to purchase the donkey engine. They had known each other and even, from time to time, worked together at the Marblehead Quarry where Ernie was Caretaker. Although Ernie was not a trained steam power engineer, he was intimately familiar with the two steam-power installations that Marblehead Quarry owned and operated—one at the Quarry and the other at the marble processing buildings at Marblehead. Moreover, Ernie, a 45-yr-old bachelor when Frank Carson and family arrived in Meadow Creek, was already an established property owner, was well connected to the community, and had disposable funds to contribute to the partnership.

Ernie eventually married Caroline Bauer, and also became Manager of the Quarry operations. He died in 1940 at age 66. Caroline passed away in 1966 at age 104. Both are interred at the Nelson cemetery.



L-R: Jack Rady, Dave Carson, Ernie V. Morel, and Frank Carson at Jack Rady's logging camp which was located west of the Lardeau River approximately at 12-Mile, somewhat south of Howser Junction, 1920s. Note: Rady is displaying the classic early-to-mid 20th century signal (often used ironically) of pride in oneself or one's accomplishments—palms out, thumbs hooked in his suspenders, and pushing them forward slightly. (LVHS Art Carson Collection).

Panel © Copyright Lardeau Valley Historical Society. All rights reserved.



A related story: The [Nelson Star 2014 report](#) about the relocation of Frank Carson's cabin from the shore of Kootenay Lake to the Lardeau Valley Museum site.