



THE WHISTLE

The official publication of:
THE BRITISH COLUMBIA SOCIETY OF MODEL ENGINEERS (BCSME)
Operators of BURNABY CENTRAL RAILWAY Vol 55; Issue 6 – November/December 2025



Luigi Moretti: Engineering the 4-6-6-4 Challenger



Photograph Courtesy of Brian Ruebottom

BCSME Member Meetings

General Meeting on November 5th & December 3rd
In-person and on Zoom 7pm

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Editor of The Whistle

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Submissions & Deadline

The editor's role is to assemble and publish the newsletter, but it truly serves as a platform for members to share their BCSME stories with one another. Your contributions make The Whistle vibrant and meaningful.

If a BCSME member has any articles or photos that they'd like to submit for publication, please send them to the editor as an attachment in an e-mail.

Please add the words "The Whistle" in the e-mail's subject line. The more submissions made by members of the Society the better this newsletter will be.

The deadline for any submissions is one week prior to an issue being published. New issues are published every second month, starting at the beginning of January.

Means of Publication

I use Apache's OpenOffice suite on a PC to create this newsletter. OpenOffice can open almost any Microsoft document file.

Photos are handled using GIMP. Any digital pictures being submitted for publication should be in as high a resolution .jpeg format as possible. 200 DPI is a good value.

The BCSME Directors

PresidentKen Lear
Vice-president.....More McCormack
Secretary.....**Vacant Position**
Treasurer.....Brian Carlson
Business Director.....Gord Tilley
Site Manager.....Peter Berry
Operations Director.....Bruce Wilson
Shop Director.....Chuck Laws
Communications DirectorMarie Rogers

Officers

Financial Review.....Bill McKenzie
Privacy.....Bill McKenzie
Security Access.....More McCormack and Dennis Bosa
Garden Railway Project Manager.....Dennis Bosa
Boiler Inspector.....Steve Harvey
Archivist.....**Vacant Position**
Librarian.....**Vacant Position**
The Whistle Editor.....Brian Ruebottom
Comm. Chair, Garden Railway.....Brian Ruebottom
Comm. Chair, Raised Track.....Doug Bach
Trainers/Examiners.....Doug Bach and Bruce Wilson
Steam Instructor.....John Ostler
Shop Frm.....Bruce Johnston (M) and Phil MacGregor (C)
Social Media Manager.....John Roberts
New Steam Loc. Project Mgr.....Chuck Laws
Comm. Chair, 100th Ann...Tom Carr and Kent Cavaghan

CALENDAR OF EVENTS

Also check: www.bcsme.org

BCSME Christmas Party

1:30-3:30pm Saturday, December 6

BCSME Frostbite Run (lunch only – no Society trains - as the East Junction will be removed and replaced over the winter season)

11:00am-1pm Sunday, January 4

BCSME AGM

Saturday, March 7

Contact for BCSME Concession and Bookings

Gord Tilley: concession@bcsme.org / **Bruce Wilson:** bookings@bcsme.org

President's Message

A busy Thanksgiving weekend marked the close of another successful running season, capped off by an impressive turnout of riders on the final day. I'd like to extend my heartfelt thanks to the Society's Directors for their dedication and countless hours of effort that keep our operations running smoothly.

We receive the positive reviews because of the many volunteer hours you contribute: working in the shop, gardening, maintaining the track, helping with general site work, and assisting with train operations on the 7½" railway or in the garden railway.

This year, we were proud to welcome visitors from clubs around the world, all of whom left impressed by the quality of our facility and the professionalism of our operations.

With the season now behind us, several new projects are on the horizon. We'll be sharing details soon about opportunities to get involved. I look forward to catching up with many of you at our December social!

Ken

Happy Steaming, *Ken Lear*, **President, BCSME**

Editor's Message

In the last issue of *The Whistle*, Daniel Ahadzadeh shared a fascinating piece on the CPKC Empress steam locomotive. It wasn't his first contribution to *The Whistle*, and I sincerely hope it won't be his last. In this issue, we're excited to feature an article by Aslan exploring the world of 3D printing. *The Whistle* can provide an inspiring space for young volunteers to develop and refine their writing skills. By engaging with this newsletter, they gain meaningful experience that enriches their personal growth. As we all know, crafting a compelling story takes effort and courage. The next time you read an article by one of our young volunteers, please take a moment to discuss the article with them, and thank them for their efforts.

The UK has recently concluded a landmark celebration marking 200 years since the birth of the modern passenger railway. The 'Railway 200' initiative reached its pinnacle in late September with a commemorative weekend at the historic Stockton and Darlington Railway (S&DR), where a restored replica of Locomotion No. 1 retraced part of the original 1825 route. The event drew thousands of spectators, including Prince Edward, who rode aboard the Experiment carriage in a symbolic tribute to the railway's legacy. Though the anniversary weekend has passed, Railway 200 continues through the end of the year with educational programs, heritage tours, and community events that celebrate the enduring impact of rail on British society.

YouTube: [Locomotion No. 1, Newton Aycliffe](#)

YouTube: [VIME Vancouver Island Model Engineers fall warm up day 2025](#)

Brian Ruebottom
Editor, The Whistle
Committee Chair, Garden Railway

JOB JAR

Item 1: Bruce has many small jobs in Operations. Please contact him at bookings@bcsme.org

Item 2: Peter has on-going jobs around the Site. Please contact him at pjberry@shaw.ca

ITEM 3: The Track Gang - if you can help, please contact More McCormack at vicepresident@bcsme.org

ITEM 4: The Garden Team will reconvene in February. Catherine needs new volunteers to help on Saturdays (before opening day) and Tuesdays during operating season.

Synopsis of BOD & Senior Managers Meetings

August 2025

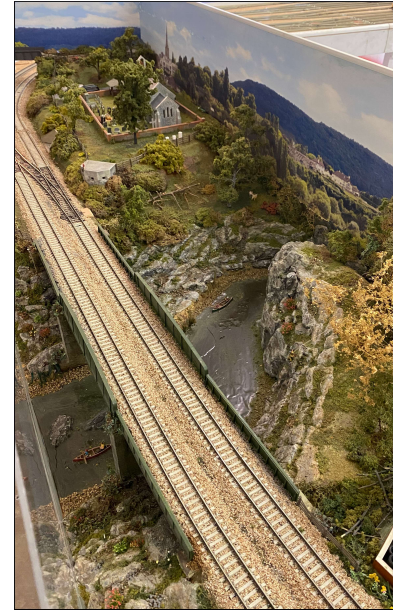
1. There are twelve decaying trees to be removed by Burnaby Forestry Department and this will happen after the park is closed for the season. The BCSME has prepared an initial budget estimate for the raised track and this will be shared in the September meeting. As part of the raised track completion, the city will not allow for the removal of any healthy trees in the area.
2. A site walk with CSI is scheduled to verify network components, which will include two lines between locations to accommodate padlocks and new door locks, with implementation planned for after the running season to avoid overlapping with current projects.
3. Public ridership numbers for this year are comparable to last year's numbers. There have also been fewer equipment issues for the current year, when compared to last year. On social media website the reviews are mostly positive.
4. The Garden Railway has had fewer volunteers come out to help this year compared to the previous year. This was mostly due to past volunteers relocating away from the area. Organizations, such as the BCSME, can find it challenging to recruit new volunteers. Suggestions were brought forward as to how the Society might attract new volunteers. We could host short videos, less than one minute, that promote the various roles in the park. A table or area could be used as a point of contact for public inquires on public run days. There should also be a focus on the context in how the public is engaged when discussing volunteer participation.
5. The BCSME is moving away from using the email program Cube to using Constant Contact. Constant Contact provides tools and practices that support full compliance with Canadian anti-spam and privacy legislation.

September 2025

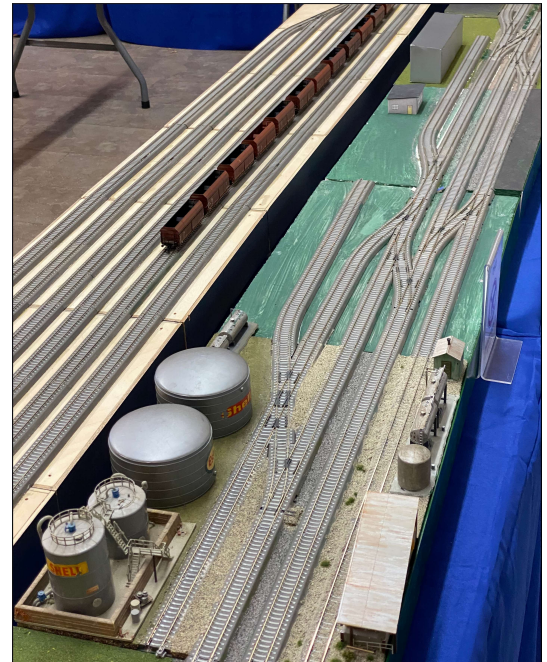
1. Upcoming BCSME events: Christmas Party – December 6th, Frostbite Run (lunch only as the East Junction will be removed and replaced over the winter season) – January 4th, AGM – March 7th.
2. Five of the BCSME's electric trains have failed this past season due to various reasons, leaving the Society low on locomotives while we are heading into the final weekends of the season.
3. The Society is approaching its fiscal year end on Oct 31st, and the Treasurer, Brian Carlson, will be soon closing off the financial records for the year.
4. The new security system installation is proceeding, starting with a control box installation in the electrical room.
5. The Society has started using Constant Contact for distributing emails with the BCSME members. Constant Contact does provide us with feed back on email openings, and it shows that 70% of emails sent out are being read by the members.
6. The Board acknowledged ongoing difficulties with both new and renewal membership processes. The potential adoption of digital tools to support and simplify membership management might help to improve the process.
7. The Society's Google profile has over 43,000 interactions and 685 reviews, with an average review of 4.8 out 5.
8. A proposal was presented to complete the Society's raised track loop. The Board discussed several challenges associated with the project, including high anticipated costs, limited member usage of the raised track, and environmental constraints. BCSME members who have locomotives gauged to the raised track are allowed to run their locomotives on the raised track. Members who are interested in the success of the raised track should come out and participate in running and maintain the track.

Visiting Clubs

Top Link Model Railway Association displayed their layout, OO scale (1:76), in Rainbow Creek Station in early September. OO scale was introduced in the early 1920s as a British adaptation of HO scale, designed to accommodate the smaller size of UK locomotives while still using HO track. It became the dominant model railway scale in the UK. The two pictures below and the one to the right are of the Top Link layout.



During the last two weekends of September TT Tracks hosted their TT scale layout at Rainbow Creek Station. TT is short for 'Table Top' and it is 1:120 scale. The track gauge is 12mm, and it sits between HO scale (1:87) and N scale (1:160). TT scale was first displayed in 1945, it went into decline in the 1960s, but there has been a resurgence since 2022. It can be DC or DCC operated. TT is considered the smallest practical scale for building scratch-built models, and it aligns well with 15mm war-gaming figures. See the picture to the right of this text for a section of track from the TT Tracks layout.



The Greater Vancouver Garden Railway Club (GVGRC) came out on Saturday, 27th September, for one last day of the season to run trains. They were back later in October to host their AGM meeting at Burnaby Central Railway. The picture below is of a live-steam Shay running on that Saturday.



Photographs courtesy of Brian Ruebottom

Thanksgiving Weekend and the Dinner

Thanksgiving Weekend

The end of the 2025 season has now passed and it was a busy season for the BCSME. The public ridership numbers, as discussed in the Aug 2025 BoD meeting (page 4 of this issue), were comparable to the 2024 season.

The Thanksgiving weekend started out with rain on both Saturday and Sunday. By the end of each day the weather had improved to just being cloudy. This was good for the Garden Railway as it gave me the opportunity to run the G-scale trains for last half of each day. We had sun on Monday, which turned out to be a fabulous day to end off the season! Thanksgiving Monday was as busy as any single day of the Easter Weekend opening of the 2025 season. The line-up was long throughout the day and Track Manager Brian Carlson used the siding by the main gate to load the birthday party guests. They were very grateful for the extra service that the Society provided.



Josh Kaive from Kitsap Live Steamers, pictured above, brought Tim Quigg's 2-8-2 Mikado steam locomotive and ran it on the weekend. It was great to have a visiting steam locomotive running on our tracks. Other Kitsap members, John and Rick, visited the previous month.

Brian Ruebottom

Thanksgiving Dinner

On Saturday, October 11, the membership was treated to an outstanding feast prepared by Catering Visions (www.cateringvisions.com). The Meeting Room was completely filled with tables serving a large attending group. The BCSME's Treasurer Brian Carlson organized the event.

All of the yummys expected at a Thanksgiving Feast were presented: slices of turkey, gravy, cranberry, mashed potatoes, cooked vegetables, dressing, pasta salad, green salad, bakery buns and much more. Special shout out to Francina Carr, who made several delicious apple-blackberry crumbles for dessert!

All in all, it was a vibrant celebration of the conclusion of a very successful Operating Season.

Paul Ohannesian



A MODEL OF THE HARRY POTTER "HOGWARTS CASTLE" LOCOMOTIVE

By Paul B. Ohannesian

Members of the B.C. Society of Model Engineers are fascinated by and skilled at making scale models of railroad equipment. Our locomotives and riding cars are scaled at 1/8 full-sized railroad equipment. Going smaller produces the various scales of "tabletop" model trains. For example, the popular HO scale is 1:87. The smallest standard small scale is TT at 1:120. Could there be yet an even smaller scale?

Yes, there is indeed a tiny scale for modelling. A company called Metal/Earth makes kits consisting of thin sheets of plated steel from which the craftsperson cuts the tiny components of a model. The parts are then folded or curved before being attached together with a system of protruding tabs and slots or eyelets to receive the tabs, after which the tabs are either twisted ninety degrees around their long axis or are folded at ninety degrees. Both methods bind two parts together. To absolutely guarantee the integrity of the model, I made use of two types of glue: (1) Two-Part Epoxy Cement, and (2) Cyanoacrylic Cement.

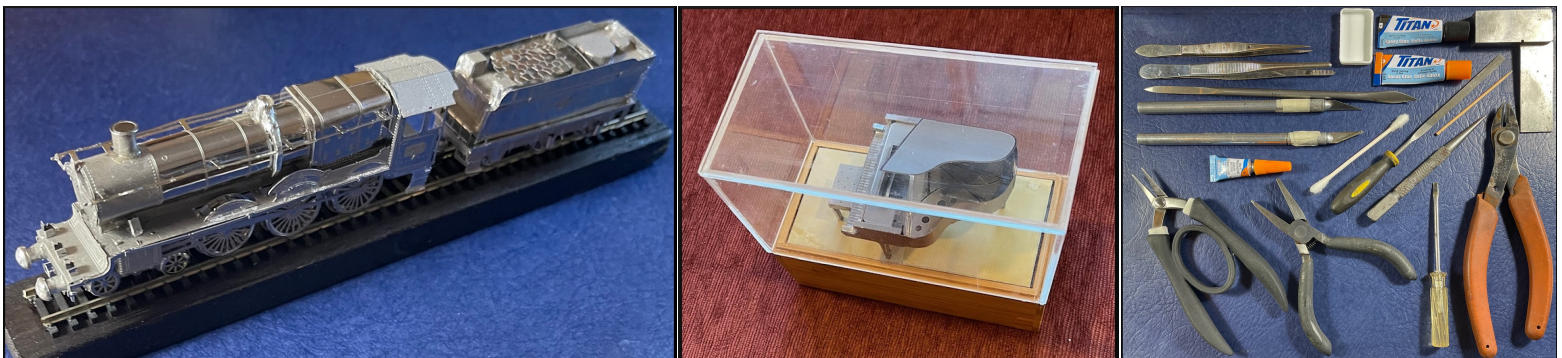
Delicate small tools are used: tweezers, a small wire cutter, tiny steel clamps, and perhaps even a miniature vise. In particular, two jaw widths of flat needle-nose pliers are required, and a magnifier is required to deal with such tiny parts.

The subject of this article is a model of the British "Castle" class 4-6-0 steam locomotive that is featured in the fictional "Harry Potter" fantasy film. It hauls a train from London's King's Cross Station to a wizardry school named Hogwarts. Naturally, the locomotive is named "Hogwarts Castle". These photographs depict the assembled model and the necessary tools to build it.

What is the scale of this model? Well, a prototype Great Western Railway Castle-class locomotive measures 65 feet and 2 inches overall, from the face of the front bumper pads on the engine to the face of the rear bumper pads on the tender. That equals 782 inches. The length of the model itself is 7.0 inches. Thus, the model is 7.0/782.0, or 1:112 scale.

The model came into my hands as a gift from a friend who had previously given me a MetalEarth model of a grand piano (illustrated). He was so impressed, he said, by the completed piano model that he gave me the Harry Potter kit. Beyond these two models I have obtained a model of the Cathedral of Notre Dame in Paris, France. Other subjects are offered by the company and they may be seen on their website at www.metalearth.com.

Well, there you have it. Perhaps this will lead to there becoming a British Columbia Society of Miniature Model Engineers: BCSMME? One never knows!



Pictures courtesy of Paul Ohannesian

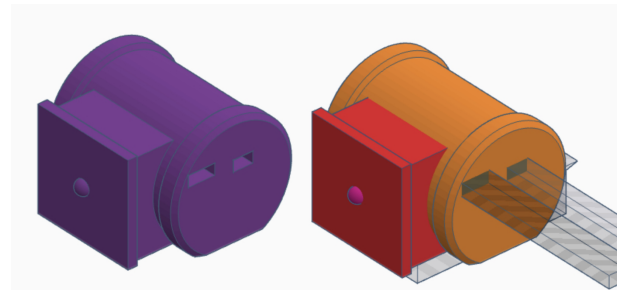
3D Printing in the Garden Railway

Author: Aslan

Hello! I'm Aslan, one of the younger members of the BCSME and a frequent volunteer of the Garden Railway. I started coming out to the park as a small child, and haven't stopped since! I first learned about 3D printing through a Thomas the Tank Engine modelling video many years ago, and I got my first 3D printer last year. 3D printing is a process that builds up objects or models over time, adding more material until the object is completed. The most common type of home 3D printing is "FDM Printing" (Fused Deposition Modelling). This means that the machine fuses plastic it deposits together to form a model.

An FDM 3D printer uses instructions generated by a "slicer," which produces several thousand XYZ coordinates that are shaped like the model. A slicer program slices the model into layers and paths the 3D printer can trace, along with controlling things like nozzle temperature and print speed. Theoretically, any model of the right file type should be able to get sliced. However, FDM 3D printers tend to have several issues with overhangs and hot plastic's tendency to droop. So usually, 3D printers use dedicated models made with those restrictions in mind.

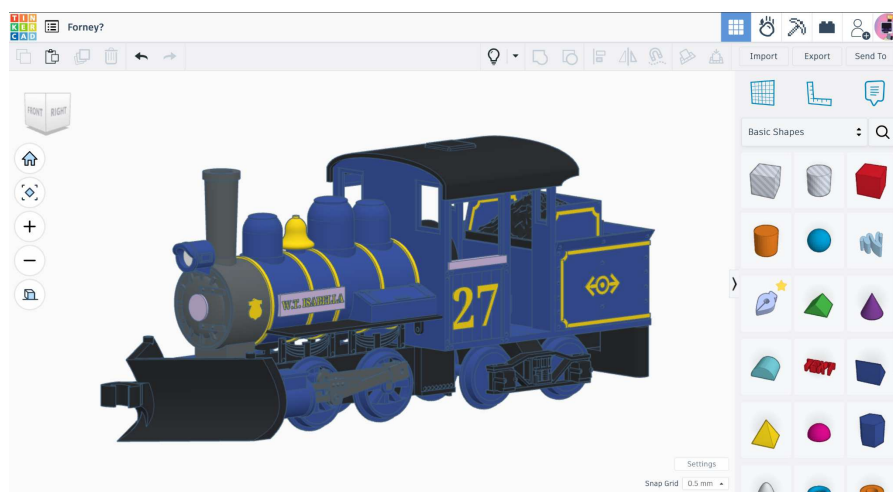
To make my designs, I use Tinkercad, an elementary Computer Aided Design (CAD) program aimed for young school-kids. It works by combining blocks of different shapes, either adding them together or subtracting them to form holes and cavities. Right: A slide-valve piston, broken up into the block and "holes." (The transparent gray blocks with cross-hatching)



This concept may sound basic or under-detailed, but with enough patience many amazing creations can be made. For example, a cab may be a box with windows and an interior carved out of it. Funnels are just cones with a bore through the center, and so on.

My design process usually consists of looking at reference images of real locomotives, then placing down large cubes and cylinders to mark out parts of the engine. I then start detailing, seeing what I want to add, modelling it, and putting it on the loco. As well, if I can re-use parts from another locomotive, then I'll copy-paste it over.

Image below: A 0-4-4RT Forney locomotive rendered in Tinkercad. It's decorated as the fictional LEG&O N°27, "W.T. Isabella."



I tend to model steam locomotives, as I find their hard lines and clear shapes simpler to break down than the usually smooth and broad curves of a diesel or electric locomotive. I use the same process on rolling stock, albeit relying more on parts re-use. Then, it's off to the printer, and afterwards, the paint shop. Once everything's put together we have a complete locomotive!

But what about the cost of the plastic? Well, one of my passenger coaches contains ~400g of plastic. 1000g of plastic costs ~\$25 from the brand I use, which works out to ~\$10. Even when I add in the cost of wheels and couplers, 3D printing is still a far cheaper option than buying a “proper” model.

3D printing is a great way to make models, but as always, there’s a catch. FDM printers struggle with small details, and I wouldn’t use a 3D printer for anything smaller than O scale. Even some of my G scale models are marred by this lack of precision. By the nature of how 3D printers work, noticeable layer lines are formed, and these lines can be off putting to some people. This can be mitigated with filling and sanding, but it’s a long and labour-intensive process. As well, the cost of the printer alone is usually quite high. Professional 3D printers are into the thousands of dollars, but entry level 3D printers are less than \$1000.00. Engineering models yourself is also very time-consuming, and ensuring compatibility can be very difficult at best. But if you’re up to it, spend some time on a computer and you’ll have yourself a custom locomotive!

Below: A printed and painted Forney design. Rendered as the (also) fictional LEG&O №23



Some of my own G scale locomotives can be found free for downloading [here!](#), or you can find me on Printables.com as MaybeCrazii_1793480.



Bottom picture of Aslan's 3D printed train at the BCSME Garden Railway is courtesy of Brian Ruebottom, all other images above belong to Aslan.