

Projects

Into the Hills of the Himalayas, an Exotic Adventure

By John D'Angelo



Darjeeling in the Mist, photo courtesy of Benoy Thapa.

The Himalayan Mountains, India, Darjeeling tea; these are words that make me think of novels written by Rudyard Kipling. There is one word that I would use to express the feeling I get when I read those words, and that is *Exotic*. Along with those words there is also a railway that is one of the most exotic little railways you can find.

The *Darjeeling Himalayan Railway* is the smallest of India's "Toy Trains." All of the narrow gauge trains in India are called *Toy Trains*; and the narrowest gauge railroad is the DHR, being a 2-foot gauge railway.



DHR Toy Train, courtesy of Benoy Thapa.

I want to thank Benoy Thapa, who lives in Darjeeling, India, for his assistance in writing this article. Benoy has graciously allowed me to use information and material from his web site (<http://www.geocities.com/benoythapa2000/timings.html>) for this article. He has amassed a very good amount of material about the DHR, and I am grateful to him for his help. Please visit his web site for more information about the DHR. Benoy also has a personal web site (<http://benoy.50megs.com>), which is also a great place to visit.



Darjeeling Tea Garden Hills, photo courtesy of Benoy Thapa.

History of the DHR

The *Darjeeling Himalayan Railway* started operation in 1881. At that time, India was part of the British Empire and, being able to move up into the mountains to escape the sweltering heat of the lowlands during the summer months, was one of the reasons it was built by the British. Malaria was a major illness in those days and a hospital was built in Darjeeling so that patients could escape the heat. The railway also opened up transportation into the Himalayan hills where the best tea could be grown and brought to market. Darjeeling Tea is known around the world as *The Champagne of Teas* and to this day is a highly prized beverage.



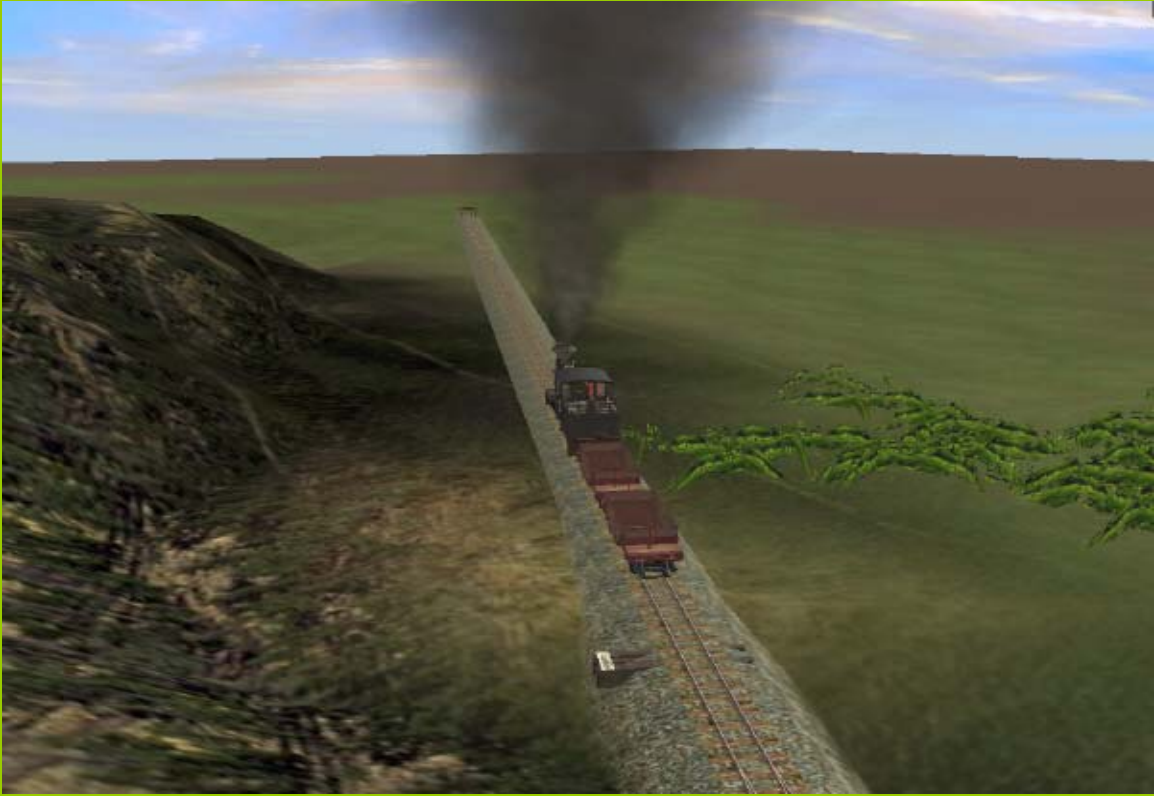
Darjeeling Tea Garden, courtesy of Benoy Thapa.

The *DHR* starts from the town of *Siliguri* located 500 feet above sea level and ends at *Darjeeling* located in the hills of the Himalayan Mountains some 6,812 feet above sea level. What is really amazing about this little railroad is that it climbs grades over 5%, makes turns as tight as a 50 foot radius, loops over itself in a number of places and uses a number of "Z" sections to allow the little mountain goat of a train to traverse the most difficult terrain ever seen. The distance from *Siliguri* to *Darjeeling* is about 80.06 Kilometers or 49.75 miles. A "Z" section is the same as a *switchback*, where a train will pull ahead into a siding, throw the switch, go back up into a siding past the second switch, throw that switch, then proceed forward over the higher track. This technique is used to climb up the side of steep hills. And it is here that the steepest grades on the railway are found. The only railroads that experience steeper grades are *cog* railroads such as the *Pikes Peak Cog Railroad* in Colorado. Currently, the only non-*cog* railroad that achieves a higher altitude is a railway in the *Andes Mountains* of Peru.

Once the gallant little train reaches Darjeeling, the locomotive is run around to the other end of the cars and on the return trip it runs backwards all the way down!

A Trainz Demonstration of a Switchback Move





The train enters the siding and the switch is thrown.



The train reverses up the very steep grade to the next level.



The train enters the upper siding and the second switch is thrown.



The train continues ahead on the upper track.

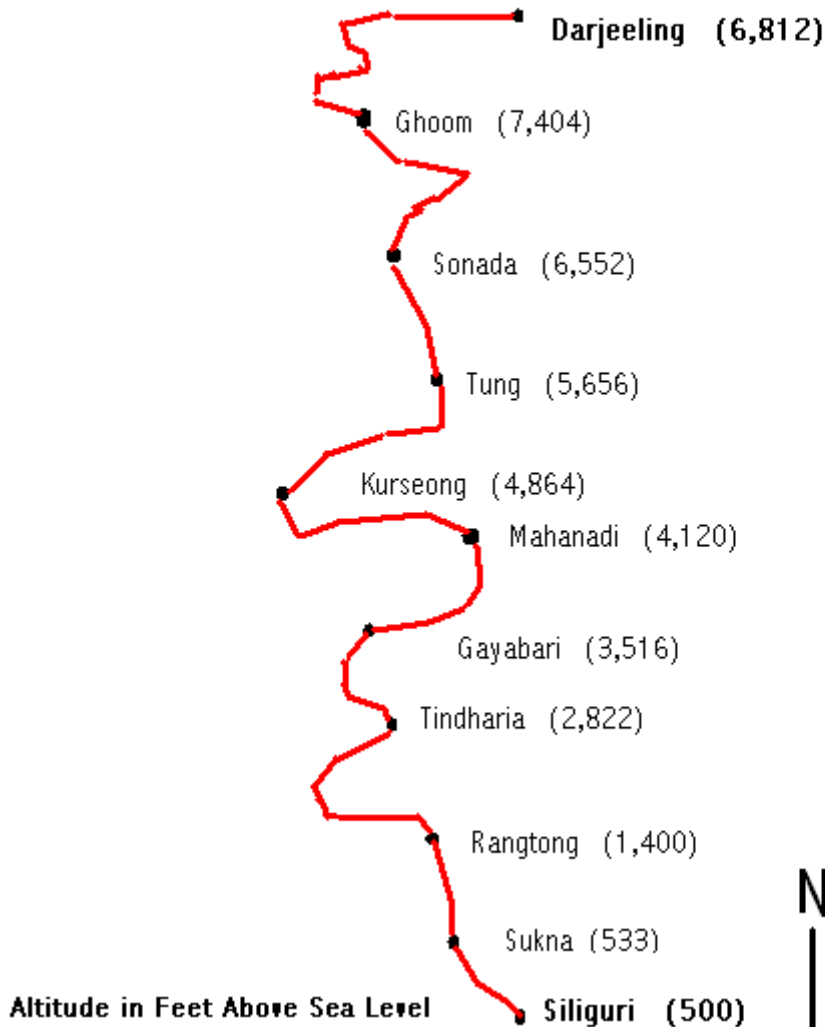
From the statistics given to me by Benoy Thapa, the Darjeeling Himalayan Railway has the following items jammed into its 50 mile run:

- 919 curves
- 556 bridges
- 3 loops
- 5 "Z" sections.

In addition to that convoluted track work there are numerous landslides and settlements of the roadbed during heavy rains to deal with. The Darjeeling Himalayan Railway is, without a doubt, a true adventure in railroading! It is still in operation today and is being manned by very brave and determined people.

Darjeeling Himalayan Railway Route

(Not to Scale)



The motive power for the railway was and still is steam. The locomotive model used on the line is a British design known as the "B" class 0-4-0 Saddle Tank design weighing 14 tons. This small but extremely tough little engine could pull four 24' carriages up the steep inclines of the railway. The short length of the engine and cars is vital because of the tight radius curves. There are no more parts being manufactured for these locomotives and it is becoming more difficult to keep them running each year. Small diesel locomotives are being introduced to the route and may eventually replace them. If they are replaced, I will miss them greatly.



Class "B" locomotive and passenger cars, courtesy of Benoy Thapa.

Our Big Project

A number of members of the Trainz Narrowgaugers group have decided that creating a detailed model of the Darjeeling Himalayan Railway for the *Trainz* virtual railroading program would be an admirable project. The project now has the official title of:

The Trainz Darjeeling Himalayan Project

We now have a web site dedicated to the project at <http://darjeelingtrainz.com> . The web site will have a forum and other sections. When the route is completed it will be available from that site as a free download to the public.

The project group currently consists of the following people, listed in alphabetical order:

Name	Trainz ID	Home Country
John D'Angelo	Johnda1237	United States
David Drake	DM Drake	United States
Peter Hilton	Shadowline	Australia
Peter Pardoe-Matthews	narrowgauge	Australia
Bill Slack	Hiballer	United States
Michael Sutton	Sirgibby	New Zealand
Tony Weber	trw1089	Australia

Peter Pardoe-Matthews will be acting as the coordinator for this project, and can be contacted via the *Trainz* forum or emailed at: peterpar@internode.on.net .

If you would like to join in on our project, we would be glad to have you join with us in creating a model of the Darjeeling Himalayan Railway. The DHR has everything a modeler could ask for: fantastic scenery, amazing track work, unusual narrow gauge rolling stock, and a great history. This project will be difficult and time consuming, but I think it will be a fitting complement to the fine people of India who are keeping the line running.

The current running time from Siliguri to Darjeeling is 8 hours, and we have decided to try to shorten the model route by compressing the distance between stations. We will need to do this and keep the grades at proper slopes to maintain the proper look and feel of the original. Use of the *Trainz* fast-clock option can allow the user to simulate the full time of the run, without having to be at the keyboard for too long a period.

As the group proceeds along with the project, I will write updates for *Virtual Railroader*. Heck, I even got so enthusiastic; I ordered a tin of Darjeeling tea from India for my wife and me to sip by the

fireplace. Perhaps some day I'll be able to visit India and enjoy a cup of Darjeeling tea with my new friend. Benoy has just advised me that his tea company is on the web and pure Darjeeling tea can be ordered from that site (www.thunderbolttea.com).



Benoy Thapa.

Wish us luck folks, we've got some hills to climb!

John

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Visit the VR Reading Room at <http://www.virtualrailroader.com>