### Introduction to the Missabe Road

**History:** The mining of iron ore in Minnesota came into its own in the 1880s as early miners sought a way to move the ore to the eastern state steel mills.

The Duluth Missabe and Iron Range Railway, known as the Missabe Road, was formed in 1937 through the merger of railroads already under common of US Steel ownership; the Duluth Missabe and Northern and the Duluth and Iron Range.

Mining has grown to be northern Minnesota's biggest industry, employing miners and railroaders alike, and providing jobs that extend into the communities and businesses along the Range.

**Operations:** The Missabe's daily existence revolves almost exclusively around the hauling of iron ore from Minnesota's iron range to its ore docks at Duluth and Two Harbors.

To that end, Extra trains are called throughout the day to bring loads of iron ore from the mines into Proctor for sorting, and to the docks for loading into ore boats. as well as replenishing empty cars back to the mines for loading.

Local mine jobs distribute the empties and collect the loads from the mines across the range.

Beside the Ore Extras are scheduled trains, including the Northland's finest passenger trains and local freights.

The Missabe has two Operating Divisions based on its predecessors; the Missabe Division - from the old DM&N, and the Iron Range division - from the old D&IR.

Apart from divisions, there is also the concept of Proctor and the Docks at one end of the line, and the "North End" yards and mines that exist across the Iron Range.

## **Layout Technical Specifications**

The layout room is 60'x26' for approximately 1600 square feet of space.

The layout is modeled in HO scale (1:87 ratio) and is constructed with expanded foam boards over wood framework.

Scenery is real Mesabi Range iron ore of various colors and screenings, Woodland Scenics ground foam and various manufacturers' static grass.

The trackwork is mostly Atlas, with code 100 track on the bottom level, and code 83 on top.

Layout control is Digitrax DCC with Radio, utilizing one DCS100 and two DB150s to provide three power districts.

Non-sound locos are equipped with Digitrax decoders, and all sound units are Soundtraxx Tsunami with the exception of one TCS WOW steam decoder.

There are approximately 600 ore cars and 70 locomotives present on the layout, equipped with either Kadee or Sergent couplers.

# The Duluth, Missabe and Iron Range Railway Company

#### Offices at

4513 176th Lane NE Ham Lake, MN 55304

#### Phone

651-464.7343

e-mail: milt.spanton@comcast.net



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Information for Visiting Officials

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## **Layout Overview**

Our layout models a portion of the Missabe in HO scale. It was started in 2003, and is built on two levels. The map in the center shows the portion of the real railroad represented by the layout.

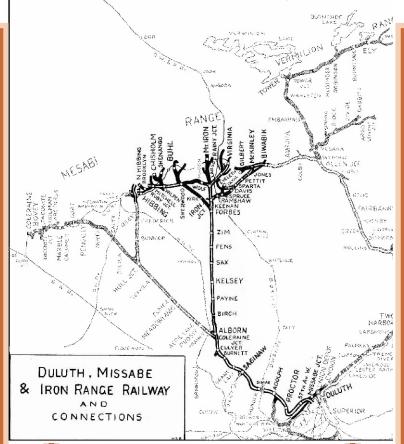
**Bottom Level:** The bottom level represents the railroad from the ore docks in Duluth, up Proctor Hill to Proctor Yard, northward from Proctor to Iron Junction, where the line splits to go to Wolf or Biwabik. Th Iron Range mines between Iron Junction and Biwabik are represented here as well.

**Top Level:** The top level represents the rest of the Iron Range that is modeled. At the top of the spiral is Wolf, where the line splits again and heads toward Virginia and Rouchleau Yard or to Wilpen. Virginia is the end of one of the Missabe's branches. At Wilpen, the line splits again, and heads north on the Great Northern's shared line to Fraser yard, or via Mitchell to Hibbing and Rust Crusher Yard.

## **Important Locations**

**Duluth Ore Docks:** The 2 Ore Docks of Duluth are the recipients of almost all of the iron ore passing through Proctor Yard. There is a Dock switch job who is charged with spotting the ore cars over the correct dock pockets to fill specific orders for iron ore for ore boats that arrive at the docks. Only Dock 5 is modeled.

**Proctor:** Up the Duluth skyline hill is Proctor, the Missabe's largest yard, and home to its largest locomotive and car servicing shops. Here, incoming ore is weighed, then sorted by ore grade to match the demands of Eastern steel mills and ore boats. Ore Extra trains originate here, heading North to bring empties to the range, and terminate here with loads brought back from the Range. Additionally, the locals freights begin and end here for Hibbing, Virginia and Biwabik, and Hill Ore trains bring sorted ore down to the Duluth Docks.



System map showing portion of lines modeled

**Saginaw:** Saginaw is an interchange point with the Duluth and Northeastern, a small railroad supporting the wood products industry in Cloquet.

**Iron Junction:** Here is the junction where trains head further north to Wolf, and ultimately Virginia, Hibbing or Fraser, or east to Biwabik. The north leg of the wye accommodates cross-range runs. The CTC dispatchers office is here.

**Wolf:** The line splits again to head into Rouchleau ore yard and Virginia, or west to Wilpen and Hibbing or Fraser.

**Largo:** Here, the Duluth, Winnipeg and Pacific crosses and interchanges with the Missabe. A tower controls the diamond.

**Rouchleau Ore Yard:** The Oliver's Rouchleau crushing plant is here, as well as a wye for turning steam locos, the Oliver's new diesel shops, and the Missbae shops in downtown Virginia.

**Sherwood:** A branch line and mainline to Hibbing merge and cross at this otherwise out-of-the-way location.

**Wilpen:** This middle-of-nowhere yard is a set-out and pick-up location for trains with too many cars, and is also the junction to head north to GN Wilpen Junction and into Fraser yard, or weswtard to Mitchell and Hibbing.

**Mitchell:** Another North End yard that at one time was a junction, but is now surrounded by mines. A cut-off in the yard allows access to the Great Northern tracks through downtown Hibbing.

**Hibbing:** The GN tracks through town allow shared access to the local industries, as well as a way to get into Rust Crusher yard form Mitchell.

**Rust Crusher Yard:** Oliver's Rust crusher supplies various grades of ore using mechanical and water separation. This is the end of the line through Hibbing.

**Fraser Yard:** Oliver's Sherman Group mines ship ore to the plant here for loading into both Great Northern and Missabe trains. Access to the yard for the Missabe is via Great Northern tracks north of Wilpen.

**Biwabik:** This is the farthest east point of the old DM&N, and serves as a another North End gathering point for ore movements to Proctor or Two Harbors.

**The Mines:** There are a variety of both small and large mining operations scattered across the range. The nearest main terminal is in charge of operating locals to distribute empties to, and collect loads from these mines. The loads are brought back to the terminal to await the arrival of Ore Extras.