From Complaints to Compliments: The Cog Cleans Up

Whether you thought it was a long time coming or noticed the final results in 2012, decades of accumulated railroad debris littering the sides of The Mount Washington Cog Railway tracks are no more.

In what turned out to be a two-year project, the clean-up was nothing short of a culture change. Citing history, Chief Engineer Al LaPrade explained, “It’s a long-time railroad practice in this country to simply leave ties and cumbersome wood by the side of the tracks as repairs are done.”

The job of picking up discarded railroad timbers, some of which can weigh 300 pounds, is labor intensive, typically requiring a five-man crew to lift and load splintered and broken ties onto a flatbed car. Nearly all the nation’s passenger and freight railroads are built on level land. On Mount Washington, the celebrated wooden trestle track climbs more than three miles up a 6,288-foot incline.

“Try to manually lift a railroad tie,” LaPrade said. “Gravity works against you.”

As environmental awareness spread in the 1960s, the public’s desire to experience a landscape that represented what Mother Nature intended grew as well. The Cog wasn’t immune from complaints about discarded material from the railway’s annual trestle maintenance. But a couple of evolutions in heavy-equipment technology needed to happen to make trackside remediation safe and economical on the mountainside.

Cog co-owner Wayne Presby found the solution in the logging industry’s relatively new use of grapple loaders to harvest and transport cut timber. The swivel picking cranes with their specially designed claws for grasping long, slender yet heavy lumber seemed an ideal match for the old railway cast-offs. He presented LaPrade with the task of adapting a logging loader so it could work from The Cog’s unique incline configuration.

With his background designing weight-handling equipment for the U.S. Navy, LaPrade began in 2009 to sketch a custom flatbed car to hold a Kesla grapple loader, a Britton Stratton gas engine and Parker pump for the crane’s onboard hydraulic power plant, plus a container cage for the collected rubble.

In all, maximum weight was estimated at 10,000 pounds. The design challenge was “never to have the flatbed tripod on the track.” The result? Six wheels instead of four to equalize suspension and six ballast bins. Powered by one of the biodiesel engines, the 32-by-8-foot custom car was pushed just like a passenger coach. It also had its own brakes for additional safety.

Construction began in late winter of 2010, and by the time the snow melted that spring, the car was finished. Debris removal then got underway.

"We did two loads a day before the first riders arrived at 8:30 am," LaPrade said, "and we worked until the first snow came."

Everyone involved in the project realized it was going to be a slow-but-steady process. Besides broken and rotting railroad ties, stringers, braces and caps, the two-man crew of John Anthony and Joesph Pychvicz also retrieved dead brush, old telegraph line, discarded galvanized pipe from when water was piped up hill to the summit and, last summer, the last manual skyline switch.

As more of Mount Washington's natural beauty started to re-emerge in 2011, Cog riders and AMC hikers were the first to notice the clean-up along the iconic elevated railway. Said LaPrade, "We started getting compliments from people who come here regularly."

By this past spring, The Cog's trackside clean-up was complete. The accumulated rubble made an impressive, if not quite attractive, pile measuring 20' x 20' x 300' at the end of the shuttle track at base camp. The next step in the clean-up process was manually removing all the spikes from the railroad ties, and extracting the galvanized pipe pieces and the telegraph wire from the mound for recycling. JML Trucking of Errol, NH has since processed the massive pile of collected wood into mulch.

And the mulch? That's Wayne Presby and The Cog's general manager Charlie Kenison's next challenge. For safety reasons, though, it won't be spread along the base of the wooden trestle. Instead, there could be new landscaping in Marshfield Base Station's future.