The Kittatinny

have loved trains ever since I was a child. My interest peaked as an adult, and I wanted to create a wonderland for my children—the one I always dreamed of having when I was young. Unfortunately, I didn't have space in my home to see these plans realized. That's when I discovered large-scale trains and learned that they could be run outside. Combining my love of the outdoors, my wife's love of gardening, and my dreams of a picturesque oasis, I entered the world of garden railways.

As a local historian, I've always taken an interest in the lore of Sussex County. area, I learned that once there were plans to expand the Sussex Railroad but those plans never came to fruition. However, my garden railroad could be the Kittatinny Mountain Railroad—the would-havebeen continuation of the Sussex line.

While researching past industry in the

History

"Kittatinny" is Native American for "endless mountains." The Kittatinny Mountain Range extends from the Delaware Water Gap to the New York State line. In the mid-1800s, the Kittatinny Mountains had limited industry. Farming was poor, due to the rocky terrain and harsh conditions along the ridge tops. Because farming was not successful, the area remained heavily forested, creating successful industries like timber and charcoal. The construction of canals and railroads led to intensive cutting on the Kittatinny Mountains and provided cheap access to markets. Though logging was abundant in this area, railroads were never used to penetrate the forests. Timber was transported via sleds and horses during the winter, while the railroads transported passengers and dairy.

My garden railroad represents what-ifs. What if trains had been used for logging



Mountain Railroad

A realistic railroad by a first-time builder

by Shawn Viggiano | Wantage, New Jersey | Photos by the author

Shawn Viggiano's railroad won an Honorable Mention in our Small Garden Railway Contest.

KITTATINNY MOUNTAIN RAILROAD

> operations? What local families would own which businesses? Studying the geography of the area, visiting old sawmills, and painting a picture in my imagination helped bring these themes to life. The resulting Kittatinny Mountain Railroad is a narrow-gauge logging railroad set in the Kittatinny Mountains of Northwest New Jersey, focused loosely on the logging industry of the area.

Bringing the theme to life

Once my theme was defined, I needed to

1. The old REA Rogers 2-4-2 pulls a Bachmann boxcar and logging caboose through a snowstorm. The engine has since been detailed and painted. The cold doesn't seem to bother the hobo in the boxcar, who cheerfully plays his harmonica. A dwarf Alberta spruce looks at home in the snow.

come up with a plan. I wanted to stay within the scales of 1:22.5 to 1:24, narrow gauge. One of my biggest priorities was that the railroad be cost effective. These scales seemed to best suit that requirement, especially when compared to 1:20.3 scale. I also had concerns that 1:20.3 scale would make my railroad seem smaller than it was.

I didn't want a large railroad, dominated by track or structures. Simplicity was important, as was making everything blend in with the surrounding landscape. I also wanted a railroad that would be suitable for continuous running in all seasons. I spent the winter of 2008 buying track and learning as much as I could from resources such as *Garden Railways* magazine and online forums like Large Scale Central.

The railroad was built in two phases. The first involved the use of about 50' of sectional track, which limited my track plan. This phase was begun in the spring of 2009. It consisted of a loop with two long, straight sections—one of which



2. The LGB Forney at the Hainsville Yard. The water tower was constructed using a metal coffee can sheathed in wooden coffee stir sticks. This was the author's first scratchbuilt structure.

went through a tunnel—and an S-curve. There was also a siding that lead to a mine. It was a simple plan, but I learned a lot in that first year.

Phase two began the following spring. This time I used flex track and added another 50' to the line. I bent the rails using a homemade rail bender I constructed after reading an article in *Garden* *Railways*. This phase consisted of a trestle, a siding to the logging camp, and a passing siding, with another siding to the engine house. The latter would serve as the yard/industrial area.

Plants and structures

Once both phases were complete, I was able to concentrate on plants and

structures for the railroad. My vision of plants included those that would stay low, grow fast, endure harsh weather, and give the railroad a natural, backwoods feel that would fit into a logging theme. I also wanted to keep the plants to scale and use as many native plants as possible. Some of the native plants and (in some cases) invasive plants used in the railroad include red cedar, locust, stonecrop, bluets, Japanese barberry, native moss, and red- and





3. A Hartland ore car sits outside the abandoned mine. The car has been weathered and detailed with cedar planks. Groundcover is native moss and creeping thyme.



4. Hartland's "Big John" sits in the scratchbuilt enginehouse. An abandoned LGB 0-4-0 sits on a siding, rusting away in a patch of creeping phlox, with scrap junk off to the side.

have made many mistakes, and still do at times. Most of the structures were built from scrap wood cut to scale, or 2 x 4s screwed together, then faced with coffee stir sticks or Popsicle sticks. Some of the roofs were made from cut-up coffee cans or cut shingles.

As I became more comfortable with building structures, I started to use scale

wood, building basic stick frames faced with scale planking.

I was lucky enough to meet a great group of gentlemen from the Tri-State Mountaineer Club. They meet every Monday to run trains, work on each others' railroads, and build structures. Their combined experience, and knowledge of engineering, carpentry, and construction,

sugar-maple seedlings.

In line with keeping the railroad cost effective, I decided to build my structures from scratch, using materials I already had on hand. I also needed to make structures that would blend in and not make the railroad appear smaller than it was.

Before I got into the hobby, I had no experience building models, but in order to keep costs down, I had to learn. What better way to learn than trial and error? I



5. The logging camp. "Big John" is dropping off a load of logs at the Snook Sawmill.



6. All structures in the Hainsville yard are scratchbuilt. Plantings complement the scene and blend it into the surrounding green expanse.





gave me the confidence I needed to build structures for my own line.

An advantage of a logging railroad is that nothing was built to look prettyrather, it was just built to serve a purpose. Any mistakes I made along the way added character and realism to the railroad.

Three areas within the railroad were set aside for structures. The first area is Hainesville Yard, which consists of a logging office, a general store, a loading dock with a shed, a water tower, a backwoods fueling station, and an engine house. The second is the logging camp, Camp Kittatinny. Here there are two bunk houses, a storage shed, and a portable sawmill—the Snook Lumber Mill, named after a wellestablished family in Sussex County.

The third area is the logging area. This area currently has a spar tree with a loader, as well as a steam donkey to power the loader. I plan on adding a high line to the spar tree that will take the cut logs to the loader. I also added a backwoods cabin with an outhouse and windmill-Mr. Russell's homestead. As there is always the potential for forest fires, the railroad needed a fire tower. At the highest point is a scratchbuilt fire tower.

All structures stay outdoors year round, allowing them to weather naturally. Nothing beats a dusting of snow on the buildings or seeing them lit up at night.

Rolling stock

The Kittatinny Mountain Railroad has a small roster, consisting of flatcars, log cars, boxcars, and, for the mine, some Hartland ore cars. All rolling stock has been repainted, weathered, and faced with real wood. I wanted everything to blend into the landscape and have the look of a railroad just getting by.

Flatcars are used mostly for the cut lumber; boxcars for supplies; and log cars for the logs. A gondola is used to haul ballast, wood, or any other material. A logging caboose and a bobber caboose round out the roster.

I recently started building additional rolling stock, including a work car and a firefighting car to protect the valuable timber. I have found Hartland flatcars work best as bases for these conversions, as does Bachmann's 1:22.5-scale rolling stock. To keep up with Old Man Winter, an Aristo-Craft snow plow clears the tracks and keeps the logging line open for

Railway at a glance

Name: Kittatinny Mountain Railroad Size of railroad: 35' x 20' Scale: 1:22.5-1:24 Gauge: Nº 1 (45mm) Era: Early 1900s Theme: Logging Age: 3 years **Power:** Track power Length of mainline: About 90' Maximum gradient: 2% Type of track: Aristo-Craft brass Minimum radius: 6¹/2' Structures: Scratchbuilt Control system: Aristo-Craft Train Engineer Website: http://kittatinnymountain. blogspot.com

business in inclement weather.

Motive power

The railroad needed engines that could handle the grades, tight curves, and lessthan-perfect trackwork. One of my first engines was a Hartland "Big John." This is



7. "Big John" refuels for a day in the woods at the backwoods fueling station at Hainsville yard, kept tidy with a mulch of fine gravel.



8. The scratchbuilt Culvers Fire Tower protects the valuable timber (Dwarf Alberta spruce) during the spring fire season.

the workhorse for log hauling. It's been repainted and detailed to improve realism.

Next on the list is an LGB Forney, another workhorse. Like the Big John, the Forney was repainted, weathered, and detailed. For lighter work, the KMRR has an LGB Porter, repainted and with an



9. An overview of the Kittatinny Mountain Railroad, a balance of structure, greenery, and fun.

added, scratchbuilt saddle tank. A more recent addition is an old REA Rogers 2-4-2 that I repainted and detailed. All of the engines on the railroad are powered by electricity through the rails. Eventually, I would like to add one battery-powered engine for snowy days.

From hobby to conversation piece

When I began laying out the railroad with string, then subsequently digging up our once-grassed lawn, it looked like a minor archaeological dig was taking place. My daughter thought we were digging for dinosaur bones and my wife panicked, as



About the authors

Shawn Viggiano lives in Wantage, New Jersey, with his wife Desiree and their two kids, 20 month-old Aiden and six-year-old Sierra. Shawn is a Park Police Officer while Desiree teaches middleschool English. Shawn has had an interest in trains since childhood and he introduced Desiree and their children to the hobby. When Shawn and his family are not in the garden they like to hike, bike, cross-country ski, and rock climb.

never-surfaced rocks were now seeing the light of day. Foot by foot, layer by layer, my front yard, for a short time, was "under construction." I had a vision as to how this would all turn out, and I had to prove that vision would not be an embarrassment.

Tormented by failed childhood attempts to build layouts, I was determined to succeed. Within weeks, a calm began to set in as this area came to life. It was better than I had imagined it would be.

Weeks and months went by and my dug-up yard was now established. Plants were thriving, small animals began to call it home, even the neighbor's cat would come over, sprawl on a rock ledge, and watch the trains roll by. As the seasons went on, I realized I had created pure enjoyment-for my family, myself, and many of nature's creatures. The Kittatinny Mountain Railroad had become an oasis. Friends, family, neighbors, and sometimes even strangers come over to indulge in all that the KMRR has to offer. The highest compliment of all is watching the smiles on their faces as they look on in amazement and realize that a dream can absolutely come true.

Plants on the Kittatinny Mountain Railroad

Wantage, New Jersey USDA Hardiness Zone 6

GROUNDCOVER

Creeping Montana sandwort Arenaria montana Bluets Houstonia caerulea (native) Platt's Black brass buttons Leptinella squalida 'Platt's Black' Sweet alyssum Lobularia maritima Golden Jenny, creeping Jenny Lysimachia nummularia 'Aurea' Native moss Allegheny spurge Pachysandra procumbens (native invasive) Creeping phlox Phlox subulata Blue star creeper Pratia pedunculata Irish moss Sagina subulata Mossy rockfoil Saxifraga x arendsii Stonecrop *Sedum acre* (native invasive) Orange stonecrop Sedum kamptschaticum ellacombianum

Blue Spruce sedum Sedum reflexum 'Blue Spruce' Hen-and-chicks Sempervivum sp. Lemon thyme Thymus citriodorus Red creeping thyme Thymus praecox 'Coccineus' Woolly thyme Thymus pseudolanuginosis Elfin thyme Thymus serpyllum 'Elfin'

TREES

Japanese barberry Berberis thunbergii (invasive) Dwarf English boxwood Buxus sempervirens 'Suffruticosa' Red cedar Juniperus virginiana (native) Dwarf Alberta spruce Picea glauca 'Conica' Rhododendron Rhododendron sp. Locust tree Robinia sp. (native)

*Plants marked "native" or "native invasive" were found growing locally.



The author built this work caboose and fire-fighting car, using Hartland flat cars as their bases. Thyme creeps up to the track.