

RECREATING THE BUFFALO CREEK & GAULEY IN S SCALE

By Brooks Stover MMR

When I selected a prototype to model, I took a road less traveled. I selected the 18.6 mile long Buffalo Creek and Gauley, a coal-hauling shortline that operated in central West Virginia between 1904 and 1965. The sole purpose of the BC&G was to haul empties from an interchange with the B&O to the company's coal mine and return with loads for the interchange. Besides the BC&G and the Rich Run coal mine, the parent of the BC&G, the Elk River Coal & Lumber Company, also owned a sawmill, a logging railroad, all the houses, stores and recreational facilities for their employees and 100,000 acres of prime West Virginia land. The period I model is 1958, just before the entire affair was sold off by the original owners. The sale marked the end of fascinating company and two railroads.



BC&G #13 is switching the Rich Run Mine at Widen as modeled on the author's S scale layout

I have been collecting information about the Elk River Coal & Lumber Company for about 30 years. About four years ago I started a website, www.buffalocreekandgauley.com, on which I have posted the information I have collected, plus an enormous amount of information that was provided by folks who visited the website and who had information and photos to share. In 2010, I compiled the information from the website into a book, *The Elk River Coal and Lumber Company*. In 2011, I co-authored a book with Bob Withers, *The BC&G in Color*, which was published by Morning Sun. The website and these two books contain all the information a modeler might need to build a credible model of the BC&G at any period in its history.

Not surprisingly, selecting a small railroad like the BC&G presented some special challenges when it came to finding motive power, rolling stock and structures. But I would suggest that the challenges to model this little railroad in S were not significantly more daunting than in any other scale. In order to build a layout and get it to the point where I could host operating sessions in a reasonable time period, I decided early on that I would focus on capturing the character of the railroad and its equipment rather than modeling every rivet. I will leave it to the reader to determine how well I did in that regard, but I've been pleased with the result. In 2011 I published a book, *Modeling the Buffalo Creek & Gauley Railroad* subtitled "Capturing the Character of An Historic Shortline On An "S" Gauge Model Railroad", that contains the complete 30-year story of 'how I did what I did' in representing the BC&G in S. A small portion of the content of that book is the basis for this article. The concepts of 'character modeling' described in the book would apply to any shortline, or larger railroad, for that matter.

Wheel Profiles

For the modeler new to S, it is appropriate at the outset to clarify that my BC&G layout utilizes what S gaugers commonly refer to as 'hi-rail' wheel profiles and track rails. In short, while the wheel profiles are substantially finer than the original S toy trains made by American Flyer (A.C. Gilbert Co.), they are slightly wider and the flanges are slightly taller than the NMRA S standards specify. I explain in the why I built my layout with these wheels and rails so won't repeat it here, but suffice it to say that all of the techniques for modeling the BC&G that I describe here and all of the equipment mentioned is or was, available with scale wheels. All the equipment is fitted with Kadee #802 couplers, one of the more commonly used couplers in S.

MOTIVE POWER

Throughout the history of the BC&G, all but two of the ten engines owned were Consolidations. In the period modeled, the BC&G had three Consolidations in service. Two were built by

BC&G #4 at Dundon – H. Ameling photo

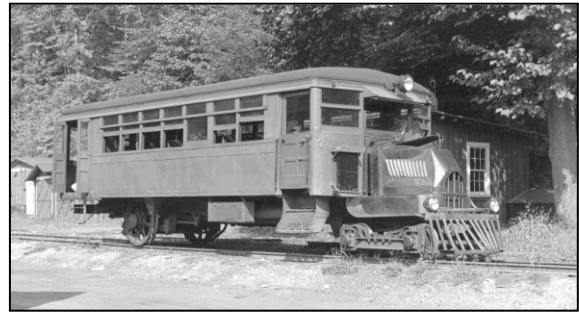
SHS Consolidation detailed to represent BC&G #4



Baldwin and one by ALCO but each had its own unique appearance. Fortunately, at the time I was building my layout, S Helper Service introduced their beautiful B&O E-27 Consolidation. This engine looks and runs as well as any engine in any scale and was built with DCC and Tsunami sound, if desired. Reasonable representations of the

three BC&G engines #4, #13, and #14 were built by moving appliances such as bells, whistles and generators to the correct location relative to the respective prototypes and by applying items such as pilot mounted air tanks that all BC&G engines had. Consolidations from other manufacturers such as BTS or Omnicon could, of course, also be used as the basis for representations of the three engines.

The BC&G operated two unique railbuses. Motor "A" was built in 1921 by Mack and was a model AC. While brass models of this type of bus have been built in HO, none have been built in S and so I scratchbuilt a reasonable representation with a styrene body on a chassis fabricated of metal. The front truck is a modified freight car truck. Scale drawings of the Mack Model AC bus have been published and are available.



BC&G Motor "A" – John Armstrong Photo 9-55

The second railbus on the BC&G roster was Motor "B". It was a two-axle, four-wheel affair that even in S would be a small model. No commercial model exists and as of now I've not tried to model it. Perhaps the reader will take that one on! Dimensioned drawings are available.



Scratchbuilt model of Motor "A" built by estimating dimensions from photos

HOME ROAD ROLLING STOCK & MOW EQUIPMENT

The BC&G had a wonderful, eclectic assortment of rolling stock, all second hand. The road rostered three old coaches which served as cabooses as well as carrying passengers until the line got its first traditional caboose in 1958. One, #X-6 was an ex-Reading combine that was converted to a MOW dining car. While I built my representation by splicing together parts from two American Flyer observation cars and scratchbuilding the sliding door any clerestory-roofed combine with platforms on each end would make a suitable representation.



1910-built BC&G Dining Car X-6 in Dundon yard circa 1958



X-6 modeled from 2 AF observation cars

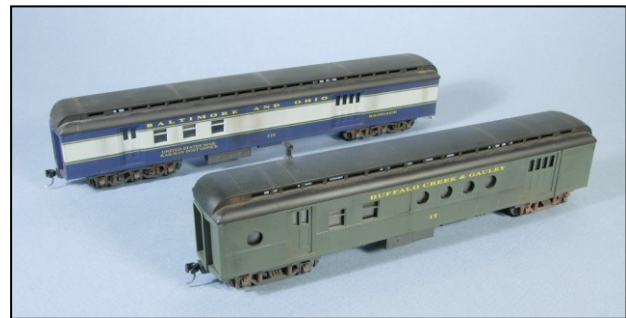
Examples include the 60' truss rod combine kit available from 'S'cenery Unlimited.

The two other coaches on the BC&G roster, #16 and #17, were interesting cars in that they had been converted by PRR from a combine and an RPO car into coaches when that road needed additional passenger capacity.

The PRR added "porthole" windows and coach seats. The BC&G acquired them in 1949 for \$1500 each. American Models RPO cars (below right) can be used as the basis for models of these two distinctive cars. The AM cars, or other similar models, can be heavily reworked to be accurate models or, as I did, model less rigorously but still capture the character of the prototypes.



BC&G #16 - John Armstrong 9-51



AM RPO car (rear) and model of BC&G #16

In 1959 the BC&G acquired two I-1 cabooses from the B&O. These were the first traditional cabooses ever owned by the line! One was put in service as C-1; the other was stored until the line closed. For years I made due on my layout with a modified American Flyer Reading steel caboose as it had the correct exterior profile and size. But now the Supply Car, LLC offers a wonderfully accurate laser-cut kit of the I-1 that only needs lettering to make a spot-on replica of C-1.



A Supply Car, LLC B&O I-1 kit lettered as the BC&G C-1



S Helper Service's BC&G steel hopper

While it might seem unusual for a railroad only 18.6 miles long, the BC&G had 900 50-ton two-bay steel hoppers in revenue service from the 1920s until their sale to the B&O in 1944. Even after that, about a half dozen of these cars remained in MOW service. Years ago I built a couple of models of these cars using AF shells and custom decals. Now S Helper Service makes very nice replica of the BC&G hopper in four road numbers making this the only piece of RTR BC&G rolling stock available in S.

BC&G crews converted two fish-belly flat cars to wood-sided gondolas. These cars were numbered #116 and #117 in 1958 although it appears the cars changed configuration and numbers over the years. It's relatively easy to build models of these cars by adding side boards to flat cars by American Models or, as I did, American Flyer flat car bodies with new trucks and other details, like grab irons, added.



BC&G #117 built from an AF flat car body with wood sides

The Official Railway Equipment Registry shows that two steel gondolas numbered 502 and 503 were on the property in 1957, although no good photos have surfaced of these cars. I represent them with built from AF bodies with new trucks and other details added. Similarly, a couple of flat cars are rostered although only good photos of #107 have surfaced. That car can be modeled from any commercially available flat, like those from American Models, or from AF bodies with details added.



BC&G Clark side dump gon #203. David Marquis photo

The cars on the BC&G's MOW roster that fascinated me most for years were the six Clark air-operated side-dump gondolas. They were originally used to haul mine waste, called gob, to the giant gob pile about 2 miles from the mine. When diesel trucks took over that



One of two BC&G Clark side dump gondolas scratchbuilt by the author

task, six of the cars were refurbished by the BC&G crews and were then used in MOW service. After determining that the only way to get a representative model of the cars was to scratchbuild them, with the help of Don Thompson of S Helper Service, I found an 1”:1’ engineering

drawing and went to work. The models are the most accurate representations of any of the BC&G’s rolling stock I have built and they make wonderfully unique additions to the layout. I know of no other way to represent these cars than to build them.

OTHER ROLLING STOCK ON BC&G RAILS

As the BC&G interchanged only with the B&O, many of the cars that appeared on BC&G rails were B&O cars. The vast majority of hoppers that came and went from the Rich Run mine were B&O two-bay hoppers with some three-bay units seen in photos. For the most part in the period modeled, the cars wore the



Typical BC&G consist in the late 1950s. Visible are B&O hoppers and a B&O box car probably with supplies for the sawmill or the mine. Photo by David Marquis.

large B&O letters on the side. At the outset I built a fleet of B&O hoppers using American Flyer bodies with details added. The B&O hopper was a common AF car and they were available cheaply. I didn’t care if the steps were broken or even other slight damage, as once new details were added and the cars

weathered, they looked fine. Now 2-bay hoppers with that B&O paint scheme are available from S Helper Service and 3-bay units are available from American Models. AM also has 2- and 3-bay hoppers in the older B&O scheme. Of course a variety of other eastern road hoppers appeared on BC&G rails (WM, Reading, NYC) and models of these roads are readily available in S. Similarly a number of B&O box cars are available from SHS and AM and Leigh Valley Models produced a kit of a B&O wagon top box car, one of which is visible in the photo below.



BC&G #4 (SHS locomotive) is heading back to the interchange with a string of loaded hoppers (modified AF cars) and box car (Lehigh Valley kit) that had carried supplies to the mine in this photo on the author's layout inspired by David Marquis' photo on the preceding page

STRUCTURES, FIGURES and VEHICLES

A great deal of capturing the character of a railroad like the BC&G is getting the structures right. There were many unique buildings on the ERC&L property and getting models that captured their character was critical to capturing the flavor of the railroad. I started scratchbuilding structures from photos in the late 1970s and have built nearly 50 of them since and there are no kit-built structures on the layout. I use inexpensive 1/16" matboard and other paper-based products and balsa/basswood plus a variety of scratchbuilt and purchased details. A two part series on the techniques appeared in the June and July 2008 issue of *SCALE RAILS*, the title of what is now *NMRA Magazine*. All the figures on the layout are from Artista and the motor vehicles are from a wide variety of sources, some reworked and all weathered.

SUMMARY

I started in S as a youngster with American Flyer and have never modeled in any other scale. My modeling evolved from toy trains to my current layout, a prototype-based layout designed for operations that reasonably captures the character of the appearance and operations of a railroad that operated 50 years ago. My original objective was to get a layout to a finished state in a reasonable time so I could enjoy it and share it with other modelers during operating sessions and through publishing articles and photos in the modeling press. That vision drove every decision I've made along the way in terms of focusing on the character of what I was modeling and not getting bogged down in 'counting every rivet' if it didn't detract from the overall effect. Modeling in S was probably an advantage in that regard as I had to make do in many cases with less-than-exact replicas because none were available RTR and I didn't want to take the time, nor did I have the skills, to model everything in exact detail. I've never regretted my choice of S. The reliability of the equipment, the ease of scratchbuilding in the larger size, the ease of reading car numbers during operations and finally the ease of photographing the larger modeling are all great advantages of S. When I started, there was little to choose from. Today, there is more available than ever before.

For those interested in learning more about the decision making processes I used in creating my BC&G equipment and layout, more information on how I build my structures, tips on taking layout photos and a complete bibliography of articles about both my layout and books on the prototype, the 106-page, full color soft-bound book ***Modeling the Buffalo Creek and Gauley Railroad*** is available at www.buffalocreekandgauley.com or contact me at buffalocreeksteam@comcast.net.

