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## 3D BACKDROPS

● Backdrops can be many layers with the sky and photographic backdrops forming the back two layers. Adding multiple layers can achieve great depth of scenery in a relatively short space. Chapter 1 covered forced perspective and backdrops are a natural way to achieve this.

The easiest way to add more depth is to start to introduce textures to the backdrop. This could be by adding relief to flat buildings using decoupage techniques, or by adding ground foam to thin card or foam core hillsides. As the backdrop becomes more and more detailed, it becomes hard to distinguish where the backdrop ends and the layout starts.



**TEXTURE** Simple hillsides can be made from ground foam sprinkled onto foam core. They add a little bit of texture. It can help to choose a duller or bluer color of green.

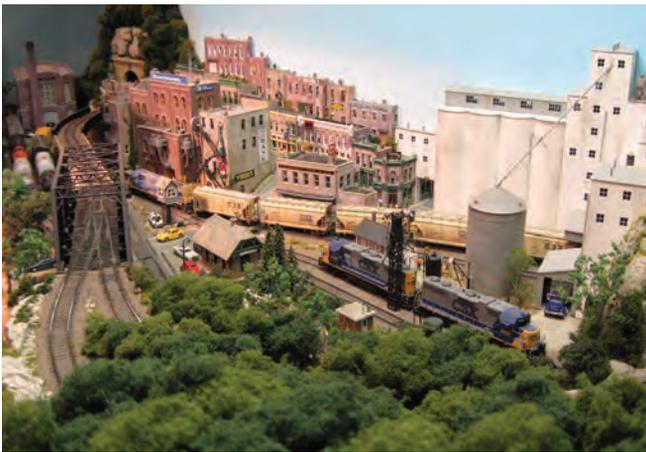
**PUFFBALLS** The name “puffball” trees does not do them justice. These hit all the right notes for a backdrop, modeling just the outline of the tree itself. They can be made in a variety of ways, but the most common is to roll a ball out of polyfiber, then to cover with spray adhesive and ground foam. Brooks Stover has used these on his S scale Buffalo Creek and Gauley layout as on the right-hand side here. *Brooks Stover*



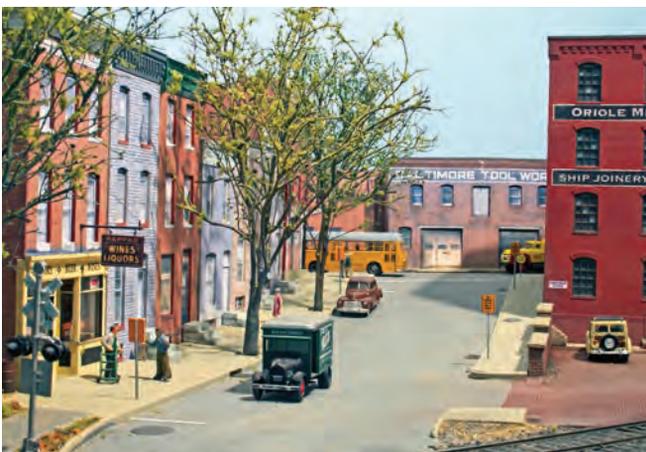


**MINI TREES** This work-in-progress photo shows the background trees on my layout. These small trees are twisted wire Z and N scale trees bought in bulk. They are not the best looking when they arrive with lurid colors. I added ground foam to create a unified look across the hillside and mounted them by poking the wire trunks into a sheet of foam core. They flow down into larger mid-ground trees on a plaster cloth base. All the foam core and plaster cloth is covered in greenery to mask any gaps.

Other ideas for distant small evergreen trees include bumpy chenille pipe cleaners, or even cocktail sticks with ground foam glued on.



**STACKING AND PACKING** Low relief houses, buildings or vehicles can be used to add more buildings into a smaller space. Rick Van Laar demonstrates how the use of progressively shallower buildings towards the rear of his Rosston, Joelberg & Holly RR enables him to fit a whole town into a relatively small space. *Lou Sassi*



**STRUCTURES** Perspective is more of an issue with backdrop buildings than with hills or vegetation. Ending a street in a T-junction is one solution as here on Paul Dolkos's Baltimore Harbor District layout. The trees also disrupt the perspective view making the two roads blend seamlessly. *Paul J. Dolkos*

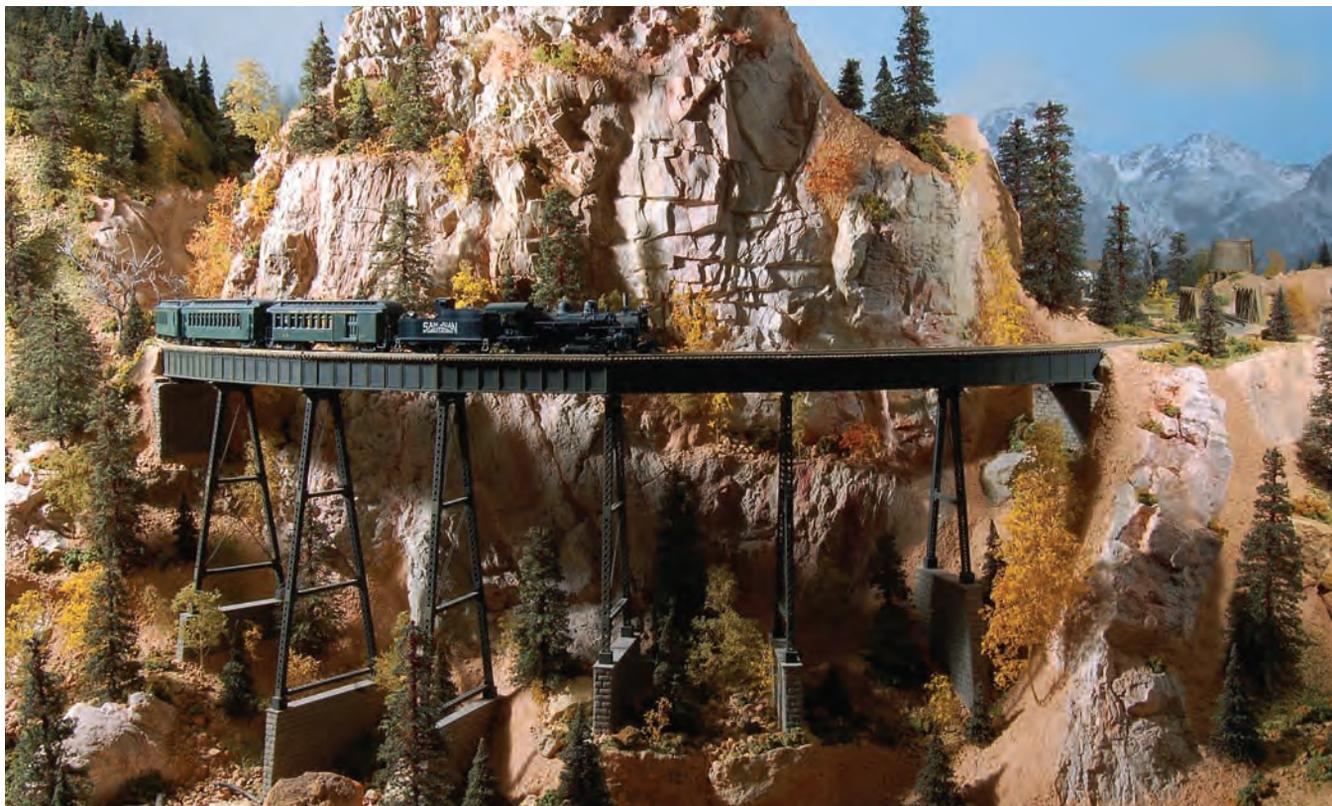
**VIEW BLOCKS** The photographic backdrop and snow scenery on the other side of this bridge does not need to extend very far to either side as the viewer is blocked from seeing farther by the other side of the bridge. This can be useful when adding scenery to small areas such as alleys, streets, or under bridges.

## BRIDGES AND TUNNELS

Bridges and tunnels deserve a whole book for themselves (see Jeff Wilson's *Model Railroader's Guide to Bridges & Trestles* from Kalmbach for ideas), but they are a key part of scenery, allowing roads and railroads to move through the contours of our scenery. Whether you choose a solid stone bridge, a spidery trestle, or choose to plunge into a tunnel through a mountain, they can be a key feature of a scene. It is important to factor in the changes in elevation that allow

us to give bridges and tunnels a reason to exist. If you have a solid surface on your benchwork, then you can always cut out and drop an area down to allow space for a river or road to pass under the railroad.

Bridges and tunnels are also useful to act as view blocks or entries and exits from scenic areas to storage yards. Whether that is the classic tunnel entrance or something a little more unusual, they are useful elements in most layouts.



**KIT-SOURCED** Rick Huntrods built this bridge in place using modified Micro Engineering tall steel viaduct kits. The tall spindly supports add a feeling of height to the mountain scene. In the planning chapter, we looked at leading lines; this trestle leads your eye from side to side but the supports take your eye up and down the mountain. *Rick Huntrods*

**CUTTING AWAY** Pat Gerstle felt his mountain scenery was too flat so he cut away the layout surface, dropping the canyon floor 2 feet to add this trestle and a much-needed feeling of height. *Lou Sassi*



### RIVER CROSSINGS

Railroads and rivers are a perfect combination as shown on Doug Tagsold's Terminal of Toledo RR layout. *Doug Tagsold*



### DESERT BRIDGES

Even if you model an area of arid scenery, there will still be changes in elevation that can be used to add bridges. Rolf Malmberg added this bridge over a dry creek and gravel road. *Rolf Malmberg*



**1** Ripples can be made from a wide variety of readily available artists materials as well as commercial modeling products. Ripples do not require specialist tools. These methods use a straw, airbrush, paint brushes, and a palette knife.

All the methods start with applying a thin layer of the ripple product to the water layer. I demonstrate four application methods but you can mix and match and use other commercial products to achieve a variety of results.



**2** Method 1: acrylic gloss medium and a brush.

Acrylic gloss medium is a white gel that dries clear. It holds the waves particularly well, but can take a while to dry.

I use a fan-shaped brush to push the gloss medium into wave shapes, then pull away to create the smoother back of the wave. This works well for seas and bodies of water with larger waves. Different brushes create different wave patterns, and a smaller fan brush will give smaller waves. For rivers, I brush the ripples on with a round brush using photos as a guide (see the resin river step-by-step).



**3** Method 2: acrylic gloss medium and a palette knife.

Large areas can be covered using a palette knife as I used for the dock water on my layout.



**4** Method 3: gloss Mod Podge and a straw.

Gloss Mod Podge is slightly thinner than the acrylic gloss mediums, which makes it ideal for methods which use blowing. It also includes a resin so it dries to a slightly tougher finish.

In this method I used a straw to blow the Mod Podge into ripples. It works well in small areas and is very cheap to do.



**5** Method 4: gloss Mod Podge and an airbrush.

For larger areas, an airbrush (without paint!) is easier to use than a straw. You will need to practice to achieve a nice rippled effect but the final result is very natural.



**6** The real difference between the two products used here is the drying time. The gloss Mod Podge, top photo, dried clear in under a day, but the acrylic gloss medium was still not clear by two days and longer (bottom photo), although it did finally dry almost clear. On the larger waves, the outer layer dries and slows the middle from drying completely. I would not recommend thick applications without testing your product's time to fully clear first.

Recently, I have started to use a hybrid polymer instead of acrylic gloss medium for larger waves. It is already clear and dries within 24 hours. However, it is a little stickier to use.

Thinner gels, such as the gloss Mod Podge, work best for river ripples where the waves are less pronounced.



**FOIL AND GLUE** This technique uses scrunched up foil covered with sheets of foil and works well for larger waves, especially when modeling coastal areas. A thick layer of white glue primes the foil so it can be easily painted. The foam and spray techniques are the same as the waterfalls step by step.



**SPACKLE WAVES** These stunning On30 waves were modeled by Troels Kirk using Polyfilla Elastic (also called flexible) spackle compound for the larger waves. He forms these by squeezing out a line of spackle, then using a dry finger to draw back the wave. He then steepens the front of the wave with a wet finger. He also used a sculpting tool to add further detail. He then paints realistic white and gray water followed up with smaller acrylic gloss gel wavelets to add more sparkle to the area. Troels used a palette knife or finger pulled upward to give these gel wavelets texture. The colors used are realistic and fit with Troels' subdued color palette across his layout. *Troels Kirk*