Landscape

In this chapter the goal is to learn the easiest methods of adding natural-looking *landscape* materials to the layout contours. Both color and texture can be added to a layout using the basic steps presented in this chapter.

By now your layout should be well underway. The idea for the layout has been created, scale and gauge determined, benchwork has been built, track and wiring are installed. You have contoured the terrain areas and colored the rocks and plaster castings. The next step in building a realistic model railroad is landscaping, which includes ground cover, ballast, bushes, grass, trees, water and roads. These landscape items make the railroad look more realistic. They are also important for camouflaging some construction flaws and for providing view blocks to make the railroad appear larger.

Chances are good that when you look out your window, you first notice landscape items. Unfortunately, this tendency to readily observe landscape features is not as easily translated to the models we build. Few, if any, model railroads have too much landscape material on them. In fact, many model railroads are noticeably lacking in landscape materials and tend to look barren and unfinished.

The choice of materials to use for landscaping a model has gone through an evolution since the early days of model railroading. In the early days the only available materials were natural ones: sticks, rocks, weeds, sand and dirt.

Hobby shops carry a variety of landscape materials in several colors and *textures* made from various materials. One key to making selections is to look for authentic colors and textures. Remember that in the real world general landscape colors are somewhat muted with patches of color and textures that blend together. Select landscape materials that reflect this reality rather than the bright, or even gaudy, colors you may see available. Look for products whose colors complement each other well since the landscape products will be intermingled throughout all parts of the layout.

The Woodland Scenics Landscape System products provide you with realistic colors and textures for modeling all parts of the country in different seasons of the year. Because it is a complete system, the colors and textures coordinate, making it possible to mix, match and blend with complete assurance that the finished product will look natural and authentic. The hard work of finding natural colors that will mix and blend together is done for you, leaving you free to concentrate on other areas.

In adding landscape material to a layout there are few absolute rules about what order to use in proceeding. Obviously, the base ground cover needs to be put on before a second layer can be added. But whether you apply ballast before or after ground cover, or whether you pour water before or after adding grasses are matters of individual preference. The landscape materials can be seen as raw materials to be applied in whatever order you feel is the most workable. The progres-

sion presented in this chapter is one method of working. We suggest that you first read the entire chapter, then alter the progression if needed to fit your layout and your preferred method of working.

BALLAST

One area where landscaping can begin is *ballast*. All railroads use it under and between ties to provide stability for the ties and provide a means for water drainage. Ballast is simply rock that is broken up into specific sizes, and spread under and between ties. Different kinds of rock are used by railroads in various parts of the country for ballast. Primarily, this selection is a function of cost. Railroads use what is available locally or what can be brought in from nearby sources, due to the cost of moving tons of rock.

Ballast can be applied at any time after the track is laid, since it helps to solidify track and keep it from moving, you might want to add ballast even before completing the terrain contours. Or, it could be the first landscape item added after the contours are completed.

Woodland Scenics Ballast is made in several different colors and sizes to provide the variety needed for most areas of the country and most scales. Select the color of Ballast desired. Be sure to consider scale when selecting Ballast. Very large rock would not fit in well between ties and very small rock would wash away.

A very useful tool for storing and applying ballast and other landscape products is the **Woodland Scenics CanisterShaker**. This is a clear, plastic bottle that has a cap from which you can spoon or sift. *Canister Shakers* allow you to see the product inside and select the size of opening needed for dispensing the product. By having one bottle for each product being used, you will be able to quickly select the product and the color needed for the area you are working on.

Using a Canister Shaker, pour a small quantity of Ballast down the middle of the track. Use a dry paintbrush to smooth out the Ballast and sweep off ties and rail. All of the rail and the tops of the ties should be free of Ballast.

Next, "wet water" should be applied to the Ballast. Mix two drops of liquid detergent in one cup of water and put in a Scenic Sprayer. Spray the "wet water" over the Ballast. Then soak the Ballast with Scenic

Pour Ballast down the center of the track. Use a dry paintbrush to sweep off ties and rail, then mist lightly with "wet water" over Ballast. Using an eyedropper to carefully apply Scenic Cement keeps if off the track, which cuts out the cleaning step.

Cement using an eyedropper. Allow the Ballast to dry.

You can spray the Scenic Cement on the Ballast, but after it has dried, remember to clean off the track with an eraser-type track cleaner to remove any traces of Scenic Cement. If the track is not carefully cleaned, power may not get to the engines or derailments could occur when the wheels come in contact with material on the rails.

Ballast can be used in other areas on the railroad besides track. Use it around mining operations, in rail yards and wherever graded rock would appear. Ballast can be used as a load in a hopper car either coming from a mine or as a railroad work car.

COAL

One product that is sometimes difficult to model is coal. **Woodland Scenics Coal** is a natural product, which solves the problem of not looking real. It comes in two sizes, the smaller **Mine Run** and larger **Lump Coal**. Coal is applied in the same manner as Ballast. Use mounds of Coal around mines or coaling facilities to add realistic detail, or as a load in a hopper.

TALUS (ROCK DEBRIS)

Due to cycles of freezing and thawing, erosion by water and wind, and human impact on the environment, rock is constantly breaking down to smaller chunks known as talus or rock debris. Talus is seen around the base of mountains and rock cuts, in mountain valleys, around retaining walls and tunnel portals, along the bottom of culverts, and in and beside rivers and streams. Because talus is created natural erosion processes, it comes in all sizes from very small rock to fairly large boulders. The mountain and water areas on the layout will not really be complete without the addition of some talus. Since talus is the rock from the local area that has broken up, a fairly close match to the color of the rocks being modeled is needed for realism.

Woodland Scenics Talus comes in a number of sizes and colors to blend with the coloring of the mountains. Or, if you prefer, the Natural Color Talus can be colored with the same Earth Color Liquid Pigments used on the rock castings and other rock areas. Attach the Talus to the layout as described in the next paragraph. After it dries, color it by daubing or spraying with diluted Liquid Pigment in the same manner described in Chapter II for coloring plaster castings.

Attach Talus to the layout by first spraying the area where it is to be placed with Scenic Cement. Use a combination of sizes of Talus in an area, with the smaller sizes on the bottom and larger sizes on the top. The boulders, which make up the Extra Coarse Talus will need to be individually placed. Spread the Talus, beginning at the tops of hills and letting the Talus make its own natural path down the mountain. Add more Talus of different sizes in these pathways as well as around tunnel portals and retaining walls, around the bottoms of cliffs and along the sides of streams and rivers. Place some Fine Talus on the tops of Talus areas for
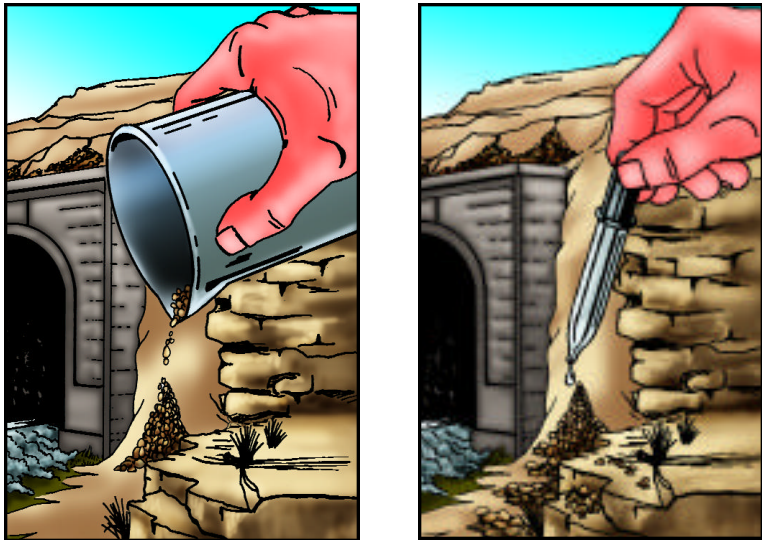
Use a combination of sizes of Talus and pour around Tunnel Portals, Retaining Walls, Culverts, below rock cliffs and rock outcroppings, in stream and river beds, in mountain valleys and wherever there is a road or rock cut. Attach the Talus with Scenic Cement.

the most realistic look. Attach the Talus using Scenic Glue. See Detailing Landscape Section on page 94 for suggestions on adding detail to Talus.

ROADS

Roads are very important features of nearly any landscape. They can be added to your layout at this time. In the countryside between towns, roads were frequently built parallel to railroad tracks. In mountainous areas, roads generally follow the valleys and divides rather than climbing to the top of each mountain. In towns, roads are parallel to track, as well as crossing track to provide access to businesses and industries for workers and customers.

TECH TIP

In mountainous areas, Talus would frequently be seen in the form of Talus cones. These occur at the base of cliffs where Talus has fallen from above to form a cone with the larger rocks at the bottom and smaller rocks forming the cone around and above them. Look for a Talus cone in the illustration below.

You will probably want to add a number of roads to the layout to give it a more realistic look. Remember that roads, like railroad tracks, are built for a purpose. They connect towns, provide access to industries and give people a route to get to their homes. When you design roads, you must also design places to put the cars and trucks that travel on them. So be sure to include parking areas by houses and industries.

When the earth contours are prepared with newspaper wads and Plaster Cloth, determine the locations for roads and make sure the road base is smoothed out in the proper width for your scale. Roads can also be added later if a new industry or mine is built, or changes are made in the terrain contours. When a road is added to an existing layout, you may need to create the flat level surface where the road will run.

There are several types of roads that can occur on a layout, depending on what type of geographic area, terrain, and time era are being modeled. In many areas and time frames, dirt roads and paths are appropriate. To construct these types of features, see the section of this book on Low Ground Cover, which covers the type of surface material used.

Woodland Scenics Road System is the best way to add roads to your layout! Making roads, parking lots, or any asphalt or concrete surface has never been easier. You can use the Road System on any surface. It is easy as one, two, three.

Woodland Scenics Road System: Easy as 1-2-3

Paving Tape

Paving Tape is an adhesive-backed foam tape that is used to outline streets, roads

and sidewalks. It is laid in parallel strips on your layout where you want your

paved surfaces.

Smooth-It

Smooth-It is a plaster material that is used to smooth rough spots, create streets, roads and parking lots. Smooth-It is mixed with water and applied directly to any clean, hard surface, between the Paving Tape strips.

Asphalt Top Coat

Asphalt creates the realism of an asphalt road or newly-filled potholes in your streets. It is painted over dried Smooth-It to model asphalt highways and streets.

Concrete Top Coat

Concrete is a great product for sidewalks and roads. It is painted over dried Smooth-It and models sidewalks, roads, or other paved surfaces.

GROUND COVER

Ground cover is the generic term, which we use for the dirt and soil as well as all of the plants and low growth that are seen both in forests and in open areas. Low ground cover includes the base coloring and smallest grasses and plants. Medium ground cover includes underbrush, vines, medium level weeds, and miscellaneous plants. And high ground cover includes bushes, shrubs, and tall grasses. All open areas left on the layout where you still see plaster or terrain base, except for spaces reserved for buildings, will need to be covered with some kind of ground cover. Ground cover should also be added to some areas that are already colored, such as plants growing on rock faces, and vines growing on tunnel portals or retaining walls.

You have probably seen lawns that are perfectly trimmed and manicured with all the grass exactly the same color and cut to the same height. This is not typical on

model railroads because it does not happen in nature or in the industrial areas that generally exist around railroads. The real world contains a variety of plants of different colors in varying heights, often growing wild in natural areas. People have a tremendous effect on these plants, not only by planting or removing them, but by their use of the areas where the plants grow. On the layout you will want to model this diversity in plants as well as landscape imperfections, both natural and man-made.

Woodland Scenics makes a number of products to help you easily and expertly add ground cover materials to the layout. First, are the **Woodland Scenics Green Undercoat** and **Earth Undercoat**. These Pigments are formulated as base colors to cover plasters as well as many other materials, including wood, foam and paper, which you may now have on the terrain base area of the layout. The next layer of material to be added is **Woodland Scenics Turf**, a ground foam material available in two grades, **Fine** and **Coarse**. Fine Turf in two blended colors and all six individual colors will be discussed in the section on Low Ground Cover. Coarse Turf will be discussed under the Medium Ground Cover section.

Your skills as a layout landscaper will increase with a little practice and also with having the proper tools and products to use. The **Woodland Scenics Canister Shaker** provides the best method of storing and applying the Turf, and many other Woodland Scenics products. The easiest approach is to have one Canister Shaker for each color and each grade of Turf. This allows you to select one, at a glance, without having to sort through bags of Turf or closed storage containers. Since Canister Shakers are clear plastic, it will be obvious when one color of Turf is nearly gone. We now carry a six-pack of Canister Shakers – the **Woodland Scenics Canister Shaker Set**.

LOW GROUND COVER

The best method of obtaining quick and complete coverage of the plaster and terrain base areas on the layout is to stain or paint them. Use Green Undercoat under primarily grass and foliage areas and Earth Undercoat under rail yards and other non-foliage areas. By painting the terrain base areas first, you will be able to attach ground cover without worrying that the white plaster or Foam Sheets will show through later on. Painting the Pigments on full-strength, or only slightly diluted, will produce an opaque coat. Allow the Pigment to dry before adding further landscape materials.

The first layer of ground cover should be of the finest texture to represent earth, soil, grass, moss and the smallest plants. The **Woodland Scenics Blended Turf** colors are designed especially to color coordinate with Woodland Scenics Undercoat Pigments. Create a base coat of ground cover by selecting Blended Turf in **Green Blend** or **Earth Blend** appropriate for the type of area being modeled. Use the Scenic Sprayer and wet the area with Scenic Cement. If the first

coat of Scenic Cement is applied to an absorbent surface, such as unpainted wood or plaster, it may absorb all the Scenic Cement and the Turf won't stick. Seal the surface first with Earth Color Liquid Pigment or a layer of Scenic Cement. The Scenic Cement will hold the ground cover materials in place and dry clear and colorless. Sprinkle on the base color of Blended Turf from the Canister Shaker, trying for a uniform coverage. Allow the Scenic Cement to dry, and then vacuum up or blow off any excess Blended Turf. Turf can be used to cover up any surface texture by adding successive coats.
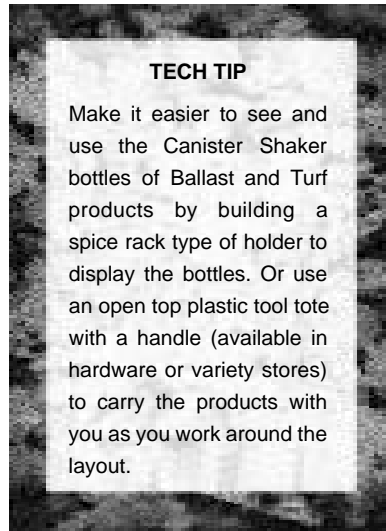
The Turf looks very monochromatic at this point. To get a more realistic look, add layers of more color and more texture to simulate the various sizes and colors of vegetation that really exist in the world. By continuing to use the Woodland Scenics system of products you will be able to achieve this realistic look just as easily as you added the first layer of color. Take a look now at pages 59-64 for some color photos of sample landscape areas. These photos should provide some ideas on the type of look that can be created. It is all done with the Fine Turf products and the larger landscape items, which we will discuss in the next few sections.

BLENDING TURF

The key in adding additional color to the base layer of Blended Turf is to add other Fine Turf colors in a technique of blending. This involves creating areas of different colors, each blended into the underlying layer and into each other. Think of the Turf colors as a spectrum with a range from browns through yellows to greens. For the best effect in landscaping, begin in the middle of the spectrum with the Earth, Yellow Grass, and Burnt Grass as the first layers on top of the Blended Turf. Then add the colors on the outer edges of the spectrum, Soil, Green Grass and Weeds, as accent colors. Try to achieve a *salt and pepper*, or fine sprinkle technique, to create variations in color without harsh edges. With this technique you start by applying as little as possible, then repeat and overlap. Begin by misting the area of Blended Turf with Scenic Cement. Then, randomly add lighter or darker color on top of the Blended Turf by shaking a very light layer on in a salt and pepper fashion, blending it into the base coat and shading the edges into another color. Blow off any excess Turf, and spray a light mist of Scenic Cement to encapsulate it. Repeat with a different color. This process can be repeated as many times as desired. A final over-spray of Scenic Cement will

encapsulate the Turf making it more secure and easier to dust off later.

In some small areas there may be solid or semi-solid coverage with one color for accent. However, these are accent areas and not the general look desired for the entire layout. Shade the edges of various colors from one area into another. A darker green color could be used around lakes or streams where the ground is well watered and new vegetation is continually growing. Lighter green can occur in drier areas where vegetation does not receive much moisture. Sprinkle on some Yellow Grass or Burnt Grass to indicate dead grasses in the dry areas on mountain slopes or other rocky areas. Earth or Soil colors can be used to indicate bare spots of ground. Add the Fine Turf in thin layers for the most realistic appearance.

It is almost impossible to make Turf blending mistakes which are not correctable, so experiment with different colors, blending one into another, salt and pepper style, and shading from area to area. If you think you have put on too much of one color, just cover it up with another color. If a color appears wrong for a certain area, add another color on top. The materials are inexpensive and you will quickly learn how easy it is to create realistic low ground cover.

Very light "salt and pepper sprinkles" of Turf without a Scenic Cement base can be captured with an over-spray of Scenic Cement. The final coat of Scenic Cement will be enough to hold it all in place, but be sure to mist very gently so the Turf material is not blown around by the force of the spray.

Another great low ground cover is **Woodland Scenics Static Grass Flock**. It can be sprinkled on to represent trampled grasses or fallen leaves. Static Grass Flock can also be used to add texture to trees and hillsides. It gives your layout a three-dimensional appearance.

DRY BRUSH WITH TURF

An excellent technique for adding additional color to landscape areas with Fine Turf is the *dry brush* technique. This technique gives you the ability to add very controlled amounts of Turf very selectively. It also gives you the ability to see the
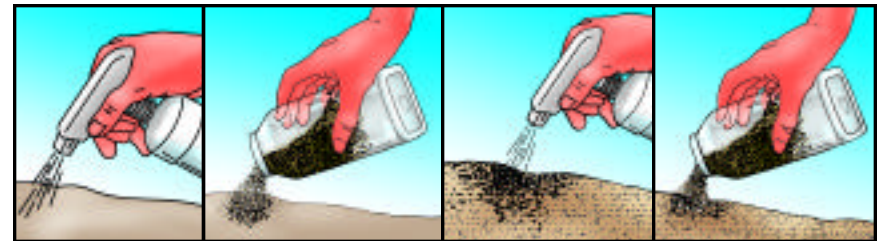

Attach Fine Turf by spraying the area with Scenic Cement from the Scenic Sprayer. Sprinkle on Green Blend, or Earth Blend Turf from the Canister Shaker for a base covering. After dry, vacuum, or blow off the excess. Re-spray the area with Scenic Cement, then add additional colors of Turf in both darker and lighter shades for color variation.

result before fixing it in place.

Allow the Scenic Cement on landscape areas to dry completely before beginning. Use a dry paintbrush with soft fibers and paint on Turf just as you would paint. Dip the brush in the desired color of Turf. Brush the Turf on where desired to add color, highlight areas, and provide accents. If you don't like the result, blow it off or brush it off with a clean dry brush. When a desired result is achieved, mist lightly with Scenic Cement to affix to your layout.

This technique gives you more control over the placement of Turf than sprinkling Turf on with a Canister Shaker. The dry brush technique can also be used to add Turf on top of Ballast or Talus to model the dirt which settles there.
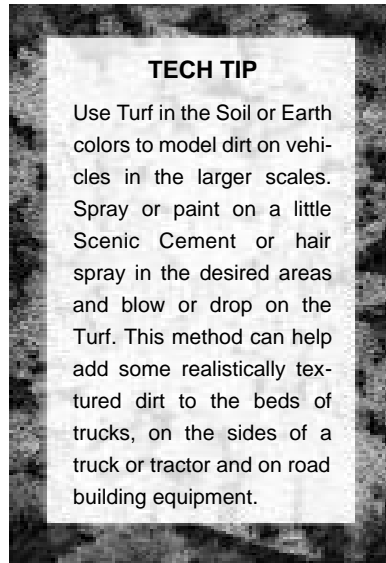
MEDIUM GROUND COVER

Although there are now several different colors of Fine Turf on the layout, the look is still one of evenly mowed grass. In the real world, vegetation is not this uniform in size. The landscape rises and falls with plants of various levels growing in random patterns. This is what we call texture. To make the layout resemble the real world, color, size, and texture are needed in the landscaping.

The next stage in landscaping is to add a medium level of ground cover by creating different textures on the low ground cover area. Start this by using the six colors of Coarse Turf. The Coarse Turf represents the rougher weeds and plants that grow almost everywhere, but particularly beside roads and railroad tracks, along streams, on mountains and hills, in mountain valleys, and around buildings. Spray on a coating of Scenic Cement to help attach this material. Then use all of the different colors and apply in patches and groupings in the areas where these plants and weeds would grow. Blend the Coarse Turf colors with the underlying Fine Turf colors to create a unified look between the texture levels. Be sure to shade the areas of one color into areas of another color. An over-spray of Scenic Cement should hold this material in place.

Another method of building up textured areas is to place mounds of Scenic Glue on the layout and then sprinkle with Coarse Turf. The glue itself creates the raised texture of the bush or weed and the Coarse Turf models the leaf structure on the top.

Woodland Scenics Underbrush represents the next texture level of weeds, coarse grasses and small plants. Underbrush comes in six colors for blending with the other Turf sizes. Use a mix of colors to represent a variety of plants. Mix


Medium level ground cover will help to give texture to the layout. Add the Coarse and Underbrush sizes of Turf in a variety of colors and attach with Hob-e-Tac or Scenic Glue. This material will model undergrowth, low growing plants, weeds and rough ground.

this texture level into the areas previously landscaped, blending the colors with the layers already put down.

Underbrush can be attached with Scenic Glue or Scenic Cement. Apply Scenic Glue to the layout and then press the Underbrush into the glue. When using Scenic Cement, sprinkle on Underbrush and spray with a coat of Scenic Cement. After attaching Underbrush, go back and add some Fine and Coarse Turf around the edges to create a flowing look to the landscape rather than individual items that stick up here and there. Underbrush may be particularly useful as part of the camouflage around the edges of buildings and as ground cover in the larger scales.

Vines and other creeping ground covers are important parts of the landscape in virtually all parts of the country. Woodland Scenics offers two products to help you create these items. Foliage and Poly Fiber will each give a distinctive look for different types of ground cover.
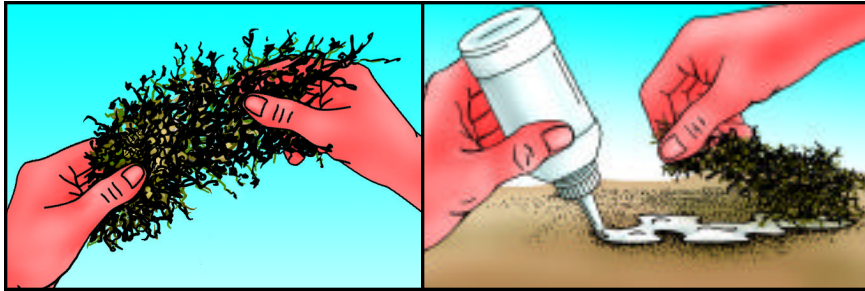
Woodland Scenics Foliage comes packaged in a dense sheet. To use Foliage, tear off a section and then stretch and pull it in all directions until it is thin and lacy. Save any Foliage that falls off to use as low ground cover. Use the Foliage to create vines and free standing ground covers which have a definite fiber or stem look, such as ivy or kudzu. Attach Foliage with Scenic Glue directly on the terrain base or to rock outcroppings, tunnel portals, retaining walls, bridges, building sides, telephone poles, and tree trunks. Vines can also be used to hide any faults or mistakes with buildings, seams in retaining walls, cracks, or gaps. As a final detailing feature, spray with Scenic Cement and sprinkle on some Fine
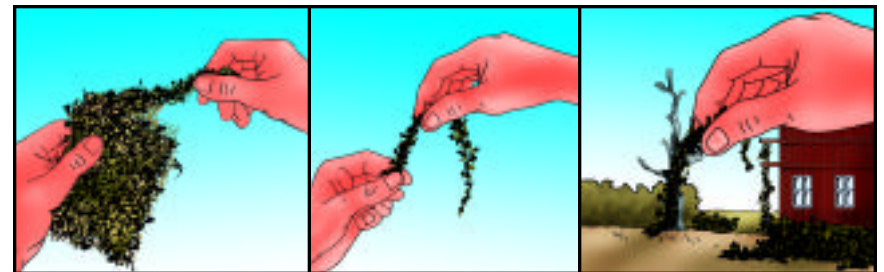
Foliage comes packaged in a dense sheet. Tear off a small piece and stretch and tear it until thin and lacy. Use it for low ground cover or vines that have a definite fiber or stem. The material works well attached to tunnel portals, retaining walls, trees, bridges, buildings, or telephone poles. Foliage is included in the Woodland Scenics metal tree kits.

Turf salt and pepper style to add variations in color. Or dry brush the high spots of Foliage with varying colors of Fine Turf and secure with Scenic Cement.

Woodland Scenics Poly Fiber is a synthetic product that should be stretched until it reaches a very thin, transparent stage. Use Poly Fiber as a light delicate ground covering to model plants like crown vetch that have smaller stems and leaves and seem to almost float above the ground. Attach Poly Fiber with small spots of Scenic Glue, then mist with Scenic Cement and salt and pepper sprinkle on Fine or Coarse Turf. This will add to the appearance of leaves elevated above the ground by almost invisible plant structures. Model flowering plants by spray-

Poly Fiber is a synthetic material that can be used to model ivy, moss and other ground cover plants. Stretch and pull Poly Fiber to a thin lacy sheet. Attach to the layout with Scenic Glue, which will dry clear.

ing the Poly Fiber with Scenic Cement, and carefully sprinkling pinches of Woodland Scenics Flowers on the top of the Poly Fiber.

Woodland Scenics Flowering Foliage models flowering vines, creeping ground cover and flowering fields. Flowering Foliage comes packaged in a dense sheet. To use Flowering Foliage, tear off sections and stretch and pull the material in all directions until it is thin and lacy. To attach it, use Scenic Cement directly on the base, rock outcroppings, tunnel portals, retaining walls and other places on the layout. Vines hide flaws in buildings or terrain. Use Flowering Foliage for flowering trees, bushes and shrubs.

HIGH GROUND COVER

The next step in creating realistic ground cover is to model the higher ground cover such as bushes, shrubs, and tall grasses. These types of plants grow in many areas in towns and across the countryside. Bushes appear as random clumps along rights of way, on the sides of hills, and in open country. They appear along fence lines, around buildings, and near water areas. Tall grasses and weeds are found in many areas beside tracks, along rivers and streams, at the edges of lakes and ponds, in open areas, beside junk piles, in rocky terrain, and around buildings.

To attach high ground covers to the layout, use Scenic Glue.

Woodland Scenics Foliage Clusters, **Bushes** and **Clump-Foliage** are patented

products made with ground foam. They are not organic and will not dry out or crumble. All of these products can be used to cover mountains, or to partly obscure some rock outcroppings. They can also be useful for hiding the line where the benchwork joins the wall behind or to help hide the edges of a lift-out section where a tunnel occurs.

Woodland Scenics Fine-Leaf Foliage is a natural product used for high ground cover also. Fine-Leaf Foliage realistically models a variety of saplings, shrubs and bushes. It can also create thickets, hedges and brush piles on your layout. Use Scenic Glue to attach Fine-Leaf Foliage, as is, to the layout. After attaching

Foliage Clusters can be broken into smaller pieces for bushes and shrubs, or used as foliage for trees. Clump-Foliage is available in three sizes. Attach shrubs and bushes with Scenic Glue and use Hob-e-Tac for attaching foliage materials to trees. These materials can also help camouflage the bases of buildings and other problem areas.

it, sprinkle on Fine or Coarse Turf around the edges to soften the landscape and give it a natural look.

Fine-Leaf Foliage can be used everywhere on your layout, because its delicate look gives the effect of natural growth on cliff faces, rock crevices, bluffs and overhangs. Fine-Leaf Foliage models the natural, fine detail of real foliage.

Trees can be modeled using Fine-Leaf Foliage also. Woodland Scenics Tree Armatures can be covered with Fine-Leaf Foliage for some of the most authentic, best-looking trees on your layout. Brush the branches with Hob-e-Tac (follow label directions). Strip the stems of Fine-Leaf Foliage between your finger and thumb. Attach foliage to branches. Then sprinkle Fine or Coarse Turf from a Canister Shaker and spray with Scenic Cement to add color and texture to the tree. Intermix the Fine-Leaf Foliage trees with other

TECH TIP

Several detailing touches can be added with the Turf and Foliage products. Use Clump-Foliage or Foliage Clusters to make a hedge. Plant by a house or building using Scenic Glue.

Use an eyedropper or fine brush to spread a little Scenic Cement in the cracks in sidewalks and streets. Sprinkle on a little Turf to model the grasses, which would be growing there.

Strip stem of Fine-Leaf Foliage between thumb and forefinger. Apply Hob-e-Tac to branches of Tree Armature (follow label directions), and press Fine-Leaf Foliage on to branches.

types of trees for more variety and realism. Because of its delicate appearance and versatility, Fine-Leaf Foliage is the ultimate foliage product.

Woodland Scenics *Lichen* is an organic material. Because of this fact, Lichen will dry out and, if extremely dry, might crumble when being handled. Woodland Scenics Lichen may dry out when humidity is very low but it can be re-softened
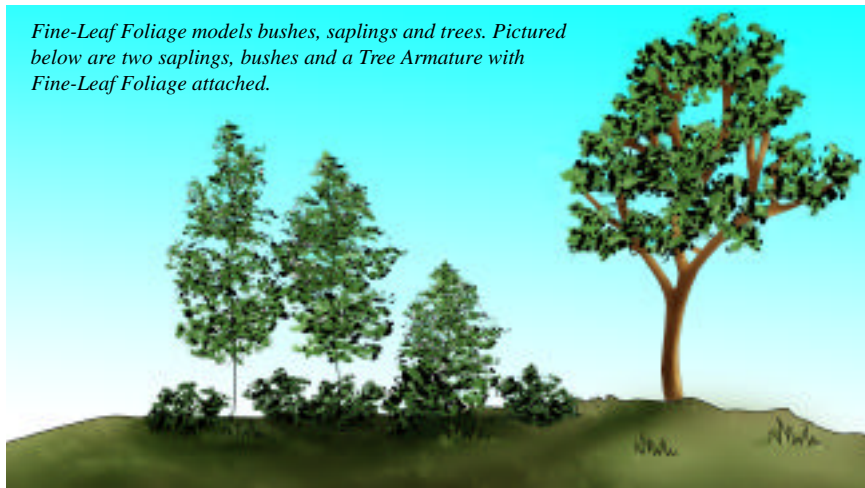
Fine-Leaf Foliage models bushes, saplings and trees. Pictured below are two saplings, bushes and a Tree Armature with Fine-Leaf Foliage attached.

by spraying it with a fine mist of water.

Before using Lichen, break up the large pieces into a variety of sizes. To give Lichen a more realistic look and sprinkle on Fine or Coarse Turf, then spray Scenic Cement. This gives the Lichen the appearance of a bushy structure with leaves on top. After sprinkling on the Fine or Coarse Turf, attach the Lichen to the layout with Scenic Glue. Adding Fine or Coarse Turf to the Lichen makes it look more realistic and similar to the other landscape materials. This means that Lichen and other landscape material can be mixed on the layout and still maintain a uniform realistic look.

Clump-Foliage, Foliage Clusters, Underbrush, Bushes, Fine-Leaf Foliage, or Lichen can be used successfully to hide junctions between buildings and the layout. Whether the buildings are attached directly, simply set in place, or installed


Use clumps of Lichen as bushes or to fill background areas with trees. Pull off a clump of Lichen in an appropriate size. Spray with Scenic Cement and sprinkle on some Fine or Coarse Turf to add detail and additional color. Lichen can be attached to the layout with Scenic Glue.

on pieces of plywood, their junction with the layout should be camouflaged with landscape materials for a more natural look. Use the Clump-Foliage, Bushes, or Underbrush as is or break up the Foliage Clusters or Lichen into various sized pieces and attach with Scenic Glue over the joints. Use the smaller Turf sizes to blend the larger bushes together.

Woodland Scenics Field Grass comes in several colors to represent both living and dormant grasses. For the most realistic look, use a variety on the layout. Since grasses and tall weeds usually grow in clumps, total coverage of an area is not needed for a realistic look. Plant scattered clumps in likely areas and blend the colors with the other ground cover for realism.

To create an uneven look to the top of the grass, roll some fibers around between your thumb and index finger in an uneven circular pattern until the ends have various heights. Pinch these fibers between the other thumb and index finger and trim off evenly in an appropriate length for your scale. Place a small amount of Hob-e-Tac (follow label directions) on a sheet of paper. Dip the blunt end of the Field Grass into the Hob-e-Tac and plant on the layout. For grass that is somewhat matted down, spread the top fibers a little before the Hob-e-Tac sets. Plant as many clumps of grass as needed to obtain the look you want. Add a little Fine
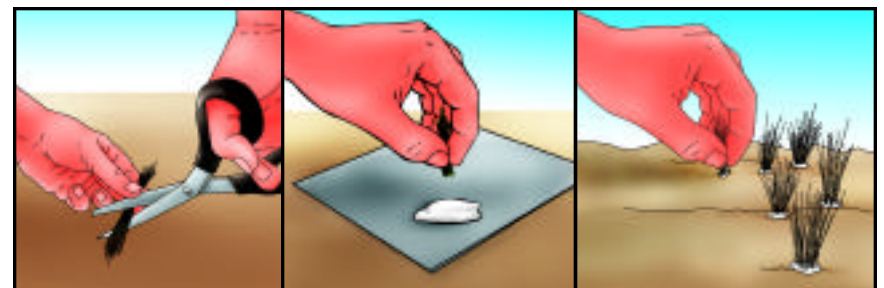
Roll a small clump of Field Grass between your thumb and index finger to produce uneven lengths. Then cut the other end of the clump evenly with scissors to an appropriate length for your scale. Place a small amount of Hob-e-Tac on a sheet of paper. Dip the blunt end of the Field Grass in the Hob-e-Tac and plant on the layout.

Turf around the base of the field grass to cover the Hob-e-Tac and represent even shorter weeds, grass or earth. Another technique is to touch the tops of the Field Grass with the flat side of a small paintbrush dipped in Scenic Glue. Sprinkle on some Fine Turf and let it adhere to the Scenic Glue. This is particularly good for representing plants like cattails and milkweed.

For a whole field of Field Grass clumps, paint a few square inches at a time with Hob-e-Tac. Take a small bunch of Field Grass between thumb and index finger and poke the blunt end onto the Hob-e-Tac. Trim off at the proper height, poke again, and trim, etc. Plant as many clumps of grass as desired for the area.

If the layout includes farm fields, first color the area with Earth Undercoat Liquid Pigment. When dry, spray with Scenic Cement and sprinkle on Soil or Earth colored Fine Turf. Small clumps of Foliage Clusters, Clump-Foliage, Bushes, Underbrush or Fine-Leaf Foliage can be placed in rows to indicate crops or gardens. Small clumps of Field Grass can also be placed in a row. A fast way to plant a row of Field Grass is to use a large clip designed for potato chip bags to pick up tufts of Field Grass and place in an even row on Hob-e-Tac Adhesive.

After installing the Clump-Foliage, Foliage Clusters, Lichen, Fine-Leaf Foliage, Bushes, Underbrush and Field Grass, stand back and look at all the landscape materials added to the layout. If there are any harsh colors or unnatural splotches of color, now is the time to add some Fine Turf to alter the color a little and blend it into the rest of the colors. Spray with Scenic Cement and add whatever colors are needed, salt and pepper style, on top of what is already in place. The dry brushing with Turf technique is ideal to use. Dip a dry paintbrush in whatever color Turf you want to add, paint it on where you want it, and then over-spray with Scenic Cement.

TREES

Only in very select areas of the country are there no trees growing. So, unless you plan to
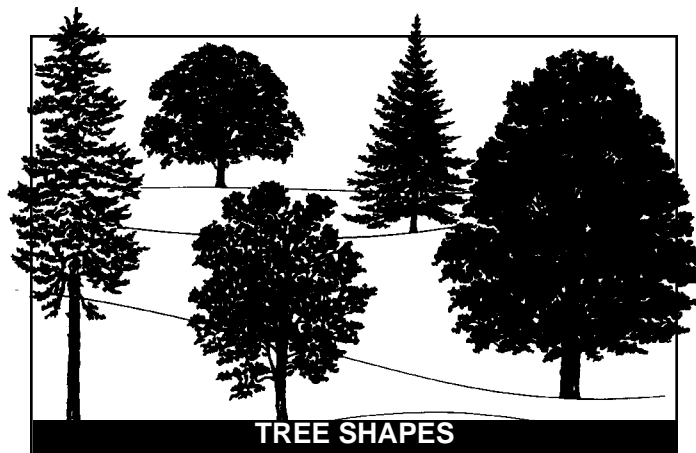
TREE SHAPES

This chart shows some of the various tree shapes and foliage patterns seen in real world trees. Create individual species of trees with as much or as little foliage as desired.

model the extreme desert areas, trees will be needed on the layout. Trees add color, texture, geographic orientation, and realism to your layout. They are also important for providing view blocks that allow the trains to briefly disappear and reappear again.

Different varieties of trees have different shapes and color, different types of foliage, and varying heights. Even within a tree species there are differences, depending on the age of the tree and the growing conditions of its environment. How specific you plan to get with the trees on the layout depends on your interests and imagination.

Trees generally fall into two categories, conifers, which retain their needles year round, and deciduous, most of which lose their leaves in fall or winter. Your layout could include trees of only one of these kinds or a mixture of the two. The selection of trees on your layout will help set the tone for the geographic location of the railroad.

Woodland Scenics products provide a variety of methods for creating beautiful trees that are easy enough for the beginner, yet will be realistic enough for the craftsman. Let's look at some of the areas where you might want to put trees and the products that can help.

When planting trees, keep in mind that trees generally occur in groups rather than individually. Look around to see the kinds of places where trees grow. Trees require sunlight and water to live. Therefore trees are found in open areas, on the sides of hills and mountains, around streams and other bodies of water, near houses, and as fence rows. Be sure to leave sufficient clearance for the trains if trees are planted near railroad tracks.

Woodland Scenics Realistic Tree Kits were created especially for the modeler. No layout is complete until different sizes, shapes and colors of trees have been affixed to the layout creating a level of scenic realism. The Realistic Tree Kits are available in two types, deciduous and pine. There are nine selections, 5 packages of deciduous and 4 of pine ranging in size from 3/4" to 8". Each kit includes a different number of Tree Armatures and enough Clump-Foliage to make up different sizes and types of trees. In two of the packages, **TR1111** and **TR1112**, a
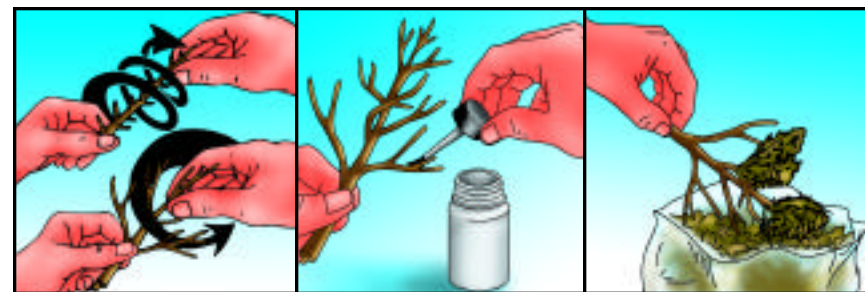
Assemble Deciduous Tree Kits by twisting and bending the Tree Armature to the desired three-dimensional shape. Add extra color or detail to the trunks with Earth Color Liquid Pigments. Clump-Foliage can be broken up into smaller pieces if needed for your scale or tree variety. Glue on the Clump-Foliage with Hob-e-Tac.

bonus of Fine-Leaf Foliage has been added so you can see the unique results obtained by adding different types of foliage to your layout. Some of the packages include different colors. Check your favorite Hobby Store for the different package offerings.

These trees are easy to make and when purchased in a kit are very economical. By making your own trees you save money and increase your opportunity to add different sizes, types and colors to your layout. Realistic Tree Kits contain bendable Tree Armatures with bark texture that are already pre-colored a flat grayish-brown color. The armatures are packaged flat. Bend and twist each armature into a three-dimensional shape for deciduous, or spiral for pine (see illustration on page 81). The trunks are bendable at room temperature, can be repositioned, and will hold their new shape. After completing any detailing of the trunks, attach the Clump-Foliage with Hob-e-Tac (be sure and follow the directions on the Hob-e-Tac label). The foliage may be used as it comes in the package or broken into smaller clumps. By doing the assembly yourself, you create exactly the look you want with as little or as much foliage as you feel necessary. The trees are planted by poking a small hole in the terrain shell or terrain base, inserting the base pin and securing with Scenic Glue. Use the temporary base if you want to move trees around the layout while deciding on their permanent locations.

Woodland Scenics Ready Made Realistic Trees are the fastest and easiest method of getting highly-detailed trees onto the layout. They come in a large variety of deciduous shapes and sizes, in either green or fall foliage. Ready Made Realistic Trees are also available in several sizes of pines. Just use these trees as they come and plant them on the layout. If you prefer slightly less foliage or wish to shape a particular variety of tree, pluck off any excess foliage before planting. Save this excess foliage to use as bushes or ground cover. The trunks of these trees are made from a bendable plastic which does not have a memory, that is, they can be bent and reformed as often as needed. The armatures (branch structure) can be shaped to match the look of a particular species of tree or to fit into a particular area on the layout. The trunks are pre-colored in a flat, grayish-brown color with a bark texture. However, they can be further detailed if desired by additional coloring with the Earth Color Liquid Pigments.

Ready Made Realistic Trees are hand-crafted to provide you with the ultimate in natural color and realistic detail. Use a mixture of tree sizes on the layout, no matter what scale is being modeled, because trees in the real world exist in different sizes. Also, be sure to use various shades of green to represent the differences in the colors of real trees.

Woodland Scenics Ready Made Realistic Trees are easily planted on the layout. Temporarily placing the base pin in the plastic base that is provided with the tree will allow you to move the trees around a little to see how they will look. When a permanent location has been determined for the tree, install it by poking a hole for the base pin and discarding the temporary base. Glue the tree in place with Scenic Glue and place some extra Turf or Foliage material around the base of the tree to represent fallen leaves or small weeds and bushes.

Woodland Scenics Tree Kits (with metal trunks) are designed to include more detail. They take more time to build and have a more "lacy" see through look. The kits contain white metal trunk armatures with more character and detail than the plastic armatures of the Realistic Tree Kits. The densely packaged Foliage in these kits is designed to provide an open lacy look compared to the Clump-Foliage.

To assemble trees from the metal trunk Tree Kits, first twist and bend the armature to a three-dimensional shape you like. Color the metal armature with any kind of acrylic paint, using the same technique as noted above with Realistic Tree Kits. Stretch and tear the Foliage in all directions until thin and lacy. Save any Foliage that falls off and use it as ground cover or bushes. Gather a clump of the Foliage and glue onto the tree armature with Scenic Glue. Each tree you create can be unique because you bend and paint the armatures, and you add the

Tree Kits with metal trunks are constructed by bending the flat armatures into a three-dimensional shape. Color the armatures with acrylic paint for a realistic look. Stretch and tear the Foliage in all directions until thin and lacy. Gather a clump and attach it to the armature with Scenic Glue.

Foliage. After working with the metal armatures, be sure to wash your hands thoroughly.

Woodland Scenics Pine Forest Kit and **Hardwood Forest Kit** are inexpensive "bulk pack" tree kits. The Pine and Hardwood Forest Kits each contain 24 trees with metal trunks of varying heights. Hardwood Forest trees are particularly good for modeling the smaller sapling type of trees, which can be mixed in with larger trees.

The **Woodland Scenics Hedge Row Scene** contains not only 18 trees, but also six bushes, three colors of Foliage and two colors of Turf. It is the economical way to build a complete hedge row 24-30" long, designed just as you want it to fit the layout area.

If you prefer, you can custom make trees using a variety of materials for the tree armatures. Successful tree armatures have been created using several varieties of weeds and plants selected for their ability to appear in scale in the small sizes. Use Woodland Scenics Clump-Foliage, Foliage, Foliage Clusters, Underbrush, Bushes, Fine-Leaf Foliage or Poly Fiber to complete these trees. Highlights and detailing can be added by misting these foliage materials with Scenic Cement and adding a light sprinkling of Fine or Coarse Turf.

More detailing touches can be added to enhance the realism of your trees. Try lightly spraying the foliage with Scenic Cement and lightly sprinkling a lighter Turf color on top of the tree and a darker color on the bottom. This gives the tree the look of sunlight hitting the top and shadows at the bottom. Fruit or flowers
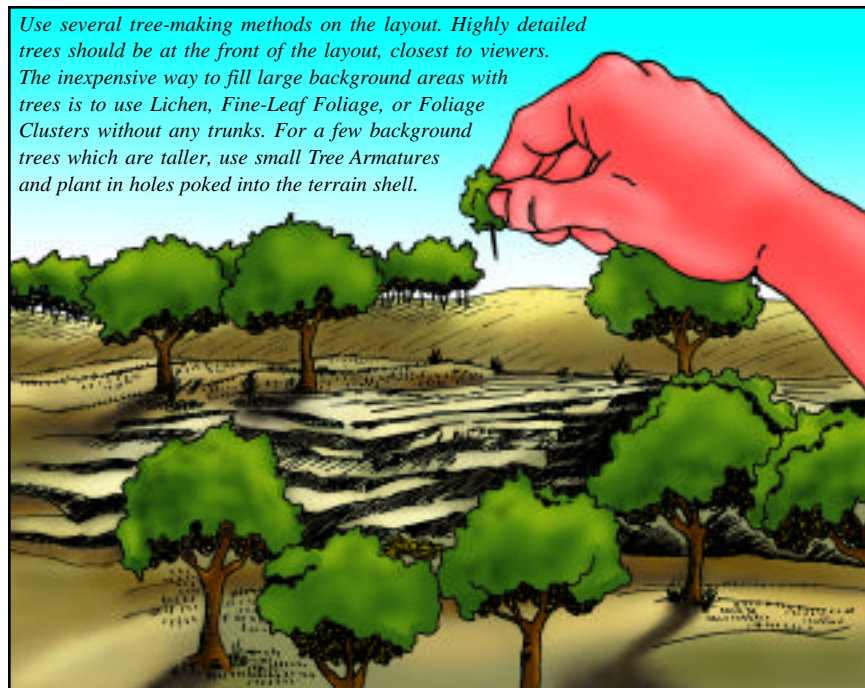

Use several tree-making methods on the layout. Highly detailed trees should be at the front of the layout, closest to viewers. The inexpensive way to fill large background areas with trees is to use Lichen, Fine-Leaf Foliage, or Foliage Clusters without any trunks. For a few background trees which are taller, use small Tree Armatures and plant in holes poked into the terrain shell.

can also be added by spraying the foliage lightly with Scenic Cement and carefully sprinkling on the **Woodland Scenics Fruit** or **Flowers** products to form fruit or flowering trees.

Woodland Scenics Tree Armatures can give you limitless tree possibilities for your layout. Armature sizes range from small fruit tree sizes to large old trees. Depending on the scale of your layout, the trees you create with your armatures can represent bushes, saplings, full-sized adult trees or huge, old trees, which have been around for years.

To make a tree using the Tree Armatures, bend and twist the Armature to the tree shape you want and brush Hob-e-Tac (follow bottle instructions) on the branches of the tree. To make a tree using either Underbrush, Bushes, or Clump-Foliage, dip the Tree Armature into the product, pull it out and shake off excess. For trees, using either Lichen or Foliage Clusters, tear off pieces of the product and press them to the Tree Armatures. Fine-Leaf Foliage is applied to the Tree
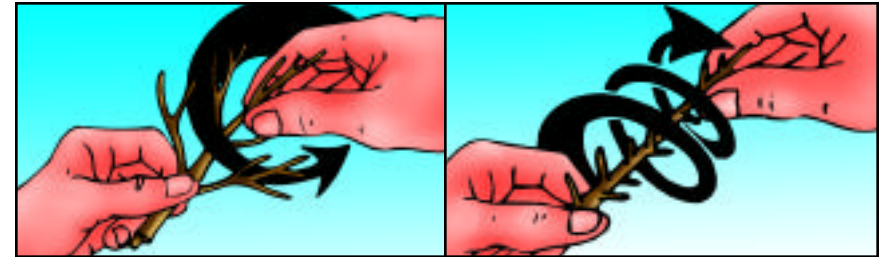

Twist and bend the deciduous Tree Armature in a variety of tree shapes. For Pine Tree Armatures, twist the branches in a spiral motion from bottom to top.

Armature by first, stripping the stems between your finger and thumb, and then pressing the Fine-Leaf Foliage to the Tree Armature branches.

Woodland Scenics has many foliage products to use with the Tree Armatures, each giving your tree a distinct, unique look. Not only are these products available to give you a variety of trees, but you can use our other landscaping products to make variations in each of these products also. For example, you could attach Clump-Foliage to the Tree Armatures and sprinkle with Coarse Turf for texture. Fine Turf could be applied on top of that for highlights and color.
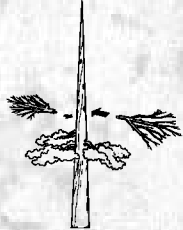
More tree tips
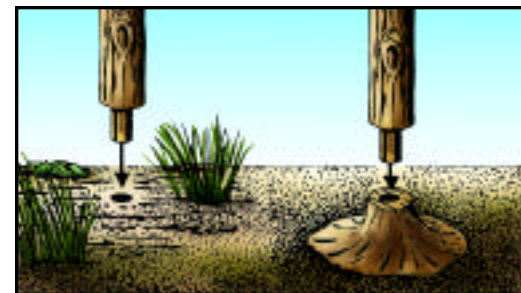
Woodland Scenics trees are planted by placing the base pin into a hole poked in the terrain shell. For temporary placement, place the base pin into the optional base. When the permanent location is decided, discard the base and plant the base pin directly into the terrain shell.

Keep in mind that trees generally occur in groups rather than individually. Also remember that different varieties of trees have different shapes. Woodland Scenics trees give you the opportunity to shape and alter the trees as needed to create the look of a particular species. Even if the forest is made up of trees of the same variety, some will have lighter and some darker foliage. Using a variety of Woodland Scenics trees to give your layout the most realistic look, because it duplicates the variety actually found in nature.

If the layout is being done in fall colors, use the Ready Made Realistic Trees which come in a fall mix of colors. Be sure to mix trees of various colors when planting. Or use the Tree Armatures and the two selections of fall colored Foliage, the fall mix Clump-Foliage, or the autumn mix Lichen, or the fall mix of Fine-Leaf Foliage.

To save money and time you may want to fill in a background area with trees that are not as detailed. These trees are the ones that are either far enough away from the viewer or clumped so closely together that no individual trees can be distinguished. They form a tree mass. A tree mass can be used to hide the junction of the layout base with the wall behind, or to foliate an entire mountain slope. We suggest that you use Clump-Foliage, Foliage Clusters, or Lichen thickly clumped and attached directly to the layout with Scenic Glue to create a tree mass.

With the tree mass technique of making trees you do not have to worry about tree trunks because they will not be seen anyway. Remember to use a mixture of realistic colors because a forest is not all the same color. Spray the tops of the Foliage Clusters or Lichen lightly with Scenic Cement and sprinkle on a lighter color of
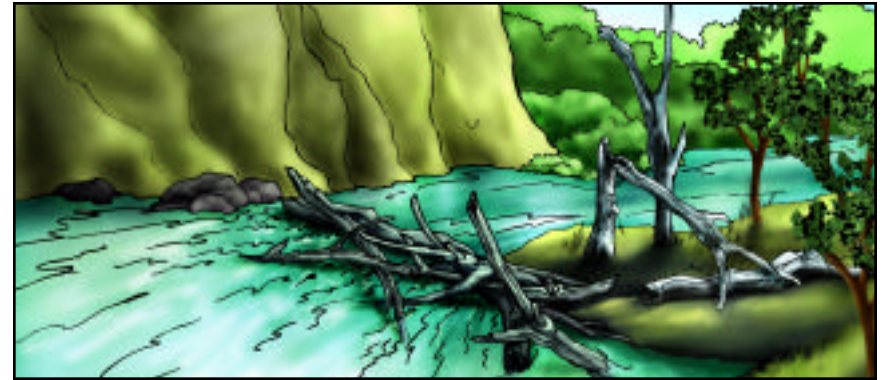
This scene shows how to model Dead Fall as a log jam or beaver dam in a river. Use Scenic Glue to attach Dead Fall to your layout.

Fine or Coarse Turf. This will vary the color and give the impression of sunlight on the mountain or forest. This step is particularly important with Lichen to give it the realistic look of foliage.

Height differences can be created using very small Tree Armatures for some of the Clump-Foliage, Foliage Clusters, Underbrush, Bushes, Fine-Leaf Foliage, Foliage, or Lichen in the tree mass. The rest of the foliage will create the illusion of some taller trees. Attach the Clump-Foliage, Foliage Clusters, or Lichen to the Tree Armatures with Hob-e-Tac and plant them by poking a small hole in the terrain base. A bit of Scenic Glue will keep the tree in place. Use detailed trees with Tree Armatures on the front edge of the tree mass to create the illusion that all the trees in the mass have trunks.

To give the layout forest area a final realistic look, add some dead or dying trees, some fallen branches, and some stumps. **Woodland Scenics Dead Fall** is a natural, dried product, which models fresh-cut timber or dying, decaying wood and can be glued to the layout using Scenic Glue. Use Dead Fall scattered down a ravine as fallen trees or limbs. Dead Fall can be used in water areas to replicate flooded timbers or as log jams on a river, foresting, or other logging operations. Dead Fall also models aging and rotting timber. Use it on hillsides and in swamps to model fallen timber and debris. Attach Dead Fall in water areas using Realistic Water as an adhesive.

You can also use either the plastic or metal type of armatures with little or no foliage for dead and dying trees. Or, purchase the **Woodland Scenics Dead Trees Kit**. Fallen branches can be made by cutting or breaking up some of the armatures and placing them on the forest floor. Be sure to add some foliage material to represent the weeds and mosses that would grow up around a fallen tree branch. **Woodland Scenics Stumps** are particularly important in a logging scene but can appear anywhere, such as along the edge of a field or fence row.

WATER

Water would frequently appear in and around a Culvert. Our water products can be added at the bottom of the Culvert in a well-defined stream or as pools of remaining water in a nearly dry Culvert. Surface rock might be seen in the area near a Culvert.

harbors and puddles, they should be included on the layout. But water has typically been something of a problem on models due to the difficulty in finding a material to use that will look natural. Real water has been used on models but it does not appear to be in scale, it gets stagnant and evaporates, and is difficult to keep confined where you want it. Glass, mirrors, Plexiglas and other materials have all been used to model water. Two part mixable plastics are frequently used to create water. They are sometimes difficult to mix in the proper proportions and once set are not alterable. They may also carry warnings against contact with eyes, skin, or lungs, by inhalation of vapors.

Locating areas for water on the layout can be considered when the original contours are created. During the newspaper wad contouring stage, leave flat, level areas where lakes, ponds, or harbors will be located. Rivers and streams will flow

Brush on Earth Color Liquid Pigments in the water area. After it dries, pour Realistic Water on the area you want covered. For shallow areas, brush on lighter colors, and for deeper areas, use darker colors.

in the valleys between the hills and mountains. These impressions will be created naturally as you build the terrain.

Woodland Scenics now has three excellent water products: **Woodland Scenics Realistic Water, Water Effects** and **E-Z Water**. All of these products can be easily applied to your layout. Each product is safe, non-toxic and models all types of water.

Woodland Scenics Realistic Water models almost any body of water, such as lakes, ponds, rivers and streams. To apply Realistic Water to your layout, no heating or mixing is required.

To prepare water areas, it is best to use Plaster Cloth to prepare the "banks" of your water cavity. The water area should have very shallow banks (less than 1/8" deep). Use Earth Color Liquid Pigments and Undercoats to color the area beneath the water, to simulate shallow and deep areas.

Shallow areas can be created using Slate Gray and Green Undercoat Liquid Pigments. Our Stone Gray and White Liquid Pigments give a "blue" look to the water. Use more white in the mixture for shallow areas and more Gray for the deeper areas. Deep water areas can be created using Burnt Umber and Stone Gray Liquid Pigments.

Make sure when you are coloring your areas to blend in the "edges" of color and avoid harsh color lines. Water areas are many shades and you will be able to create a highly-realistic look on your layout. Allow the water area to dry thoroughly before applying water products to the area.

When dry, pour Realistic Water into the shallow water cavity area you have prepared. Hold the bottle close to the layout to prevent bubbling when you pour the water. Realistic Water is formulated so that even a very thin coat will model just about any kind of standing water. We recommend that you use only one coat of Realistic Water, less than 1/8-inch deep. Drying time for Realistic Water varies, depending on the humidity of your work space, but it should be dry in 24 hours.

Realistic Water can also be brushed on rock faces, cracks, crevices and other areas to simulate water seepage. It can be thinned with water – 75% Realistic Water/25% tap water – to create streams on steep hills, or to simulate the natural flow of water over terrain. It conforms to the surface contours as it dries and is easily cleaned up with water.

Woodland Scenics Water Effects models rapidly moving water, such as rain-swollen riverbeds and waterfalls. Water Effects comes with a special applicator tip, which makes it easy to model waterfalls.

Pour strips of Water Effects, a little longer than the length of your waterfall, side-by-side, touching each other, on a non-stick surface (such as wax paper or Teflon™* pan) to create the width of the waterfall. Then feather the ends of the strips with toothpicks or any other disposable utensil. Air dry the strips thoroughly.

When your waterfall strips are ready to apply to layout, apply a small amount of
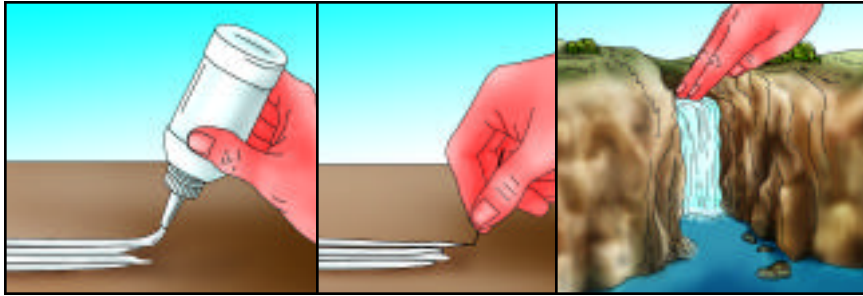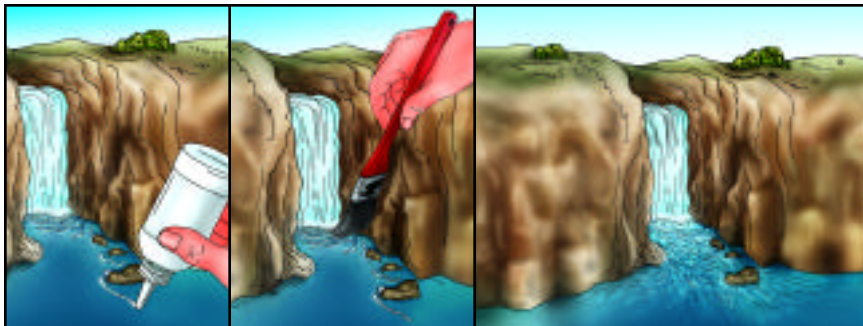
To create a waterfall, pour strips of Water Effects on a flat, non-stick surface, such as wax paper. Feather the ends of the strips with a toothpick. When dry, attach the strips by applying Realistic Water on the backside of the strips and press onto the layout. Layer several strips for the best 3-D effect.

Realistic Water to the underside ends of the fall and press them into place on your layout. This will adhere the falls to the water area. To make your waterfall three-dimensional, stack the dried strips on top of each other, using Realistic Water to bond them together, then place them on the layout in the area desired. Remember to pool water at the bottom of the fall.

You can model rapidly-moving water on your layout by pouring strips of Water Effects on top of thoroughly dried Realistic Water. After pouring the strips, use a small brush to stipple the Water Effects and allow it to dry thoroughly.

Water Effects looks great on your layout, flowing around large rocks and land protrusions. Using the special applicator tip, make pond ripples, whitecaps and other rapid water. This product is so flexible that you can shape the water in the form you want, and it dries in that shape, so it is entirely possible to make splashes, water leaks, fountains, waves and other moving waters. Its slow-curing time gives plenty of "open time" to model the precise water effect.

For that whitewater look, mix one drop of Earth Color Liquid Pigment (C1216 White) into approximately one tablespoon of Water Effects (using an eyedropper for measure is the best way to ensure accuracy). Mix gently and apply to water area. You can layer each application of the mixture, but wait 24 hours between each layer. Water Effects cleans up easily with water.

To create the rough water under a waterfall, pour Water Effects and stipple it with a brush. It creates the perfect look.

Woodland Scenics E-Z Water also models water areas. It is a low odor, non-toxic plastic product that comes in the form of pellets, which are melted and poured into the prepared area on the layout. It is particularly appropriate for water areas where you want to model flowing water such as creeks, streams, or rivers. E-Z Water is easy to use because there is no measuring, no mixing, and it sets rapidly. Texturing of the water surface and repairs such as scratches can easily be accomplished after E-Z Water is in place with the use of a heat gun.
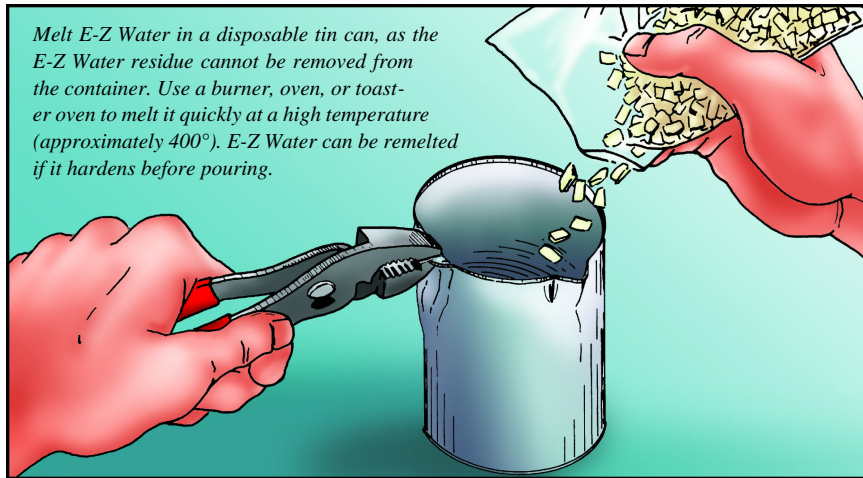
Preparing E-Z Water Areas: It is probably easier to wait until the complete ground cover landscaping is in place before adding E-Z Water to the layout. In most situations, it will be adequate to pour E-Z Water approximately 1/8" deep. Look at the areas where you plan to pour the E-Z Water. The contour materials around the edges of the areas where you plan lakes, harbors, or ponds may already be sufficient to hold 1/8" of liquid. If not, use some Lightweight Hydrocal or strips of Plaster Cloth to build up the banks. Be sure the bottom of these areas is level. E-Z Water will be heated to a high temperature before pouring. Therefore, do not pour it directly onto cellular Styrofoam or any other material which will melt.

Before pouring E-Z Water, the area underneath must be sealed to help prevent air bubbles from rising into the water. To do this, paint on a thick layer of Flex Paste wherever you plan to pour the E-Z Water and let it dry. Be sure to seal all cracks and holes. E-Z Water will set quickly enough that a small hole will not allow it to leak out. However, small cracks or holes will permit air bubbles to rise into the E-Z Water.

Coloring E-Z Water Areas: Flex Paste remains white when it is dry. E-Z Water is transparent and nearly colorless. Therefore, color must be added for a realistic looking result. Preparing water areas which have color can be done by coloring the bottom of the area or by a combination of coloring the bottom and tinting the E-Z Water itself. The water you get from the kitchen tap is clear and generally colorless, but water in its natural setting is seldom this pure. The water in lakes, ponds, rivers, and oceans has dirt, algae, and other organisms in it that help to color it.

For a greenish brown coloring of water areas, use Stone Gray Liquid Pigment brushed on full strength over the Flex Paste for an opaque covering. Allow the pigment to dry. Spray with Scenic Cement and sprinkle on a thin but even coating of Fine Turf pre-mixed in the following proportions: two parts Earth, two parts Burnt Grass, and one part Soil. Allow to dry completely before pouring E-Z Water.

Other combinations of Earth Color Liquid Pigments and Fine Turf colors can be used to create water areas with different coloring. Experiment to find the combinations that you like best. If you want to indicate more depth, add a darker color of Turf under some areas. Use Soil or Earth Fine Turf for this purpose. Blend the colors from the more shallow areas into the deeper areas for the most realistic look.

Melt E-Z Water in a disposable tin can, as the E-Z Water residue cannot be removed from the container. Use a burner, oven, or toaster oven to melt it quickly at a high temperature (approximately 400°). E-Z Water can be remelted if it hardens before pouring.

Deeper water areas like large lakes, ports and oceans are the most likely to appear somewhat blue green. Brush on an opaque layer of a medium to dark blue green acrylic paint to achieve this color. Avoid the lighter and brighter blues because they do not look natural. A little black color may be added to some areas to indicate the deeper water.

If you want to tint the E-Z Water itself, this can be done with an appropriate color of powdered Rit dye. Do not add any liquids to E-Z Water as they could boil over and cause burns. We suggest Navy Blue, Dark Green, or Pearl Gray Rit Dye. Add 1/16 tsp. of powdered Rit dye to one bag of E-Z Water pellets before melting. Be sure to thoroughly mix the dye with the E-Z Water as it melts using a disposable

Pour E-Z Water into the prepared area as soon as it is liquid. It will set nearly colorless and transparent. Prolonged exposure of melted E-Z Water to high heat will cause it to darken slightly.
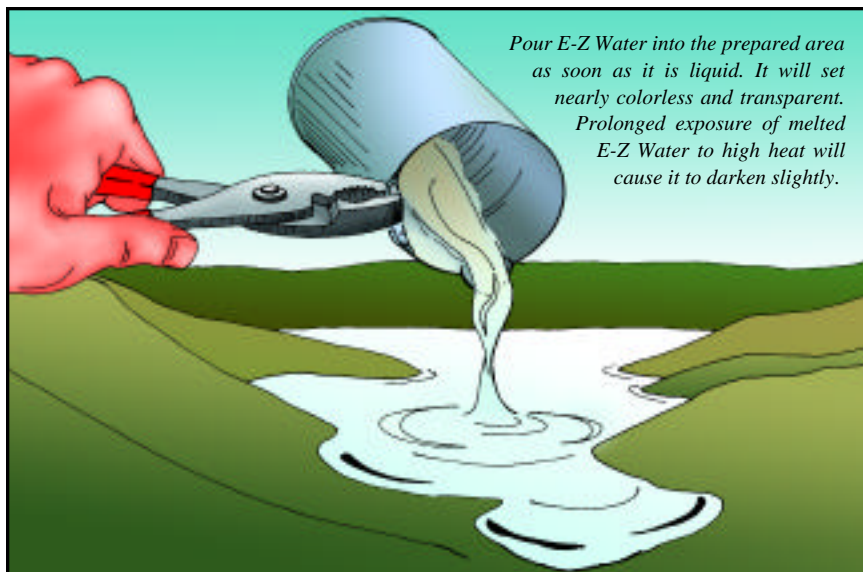
wooden stick. When the E-Z Water reaches a liquid stage, place a couple of drops on aluminum foil to check the color. If it is too light, add more powdered Rit dye. If it is too dark, add a little more E-Z Water. Prepare the water area in the same manner as above with a coating of Flex Paste. Then cover with Liquid Pigment and a sprinkling of Fine Turf before pouring the E-Z Water.

Ballast, Talus, Turf material, or Dead Fall can be attached to the bottom of the water areas before pouring E-Z Water. Attach these items with Scenic Glue after the Flex Paste covering is on and the area has been colored. Allow everything to dry thoroughly. If you want sediment to float in your E-Z Water, sprinkle some Fine or Coarse Turf in the water area, but do not attach it. When the E-Z Water is poured, this material will be suspended in the E-Z Water. Items such as sticks, rocks, or weeds may contain moisture or air pockets that will cause bubbles to form in the E-Z Water and are therefore not particularly desirable. Any plastic items you plan to imbed in E-Z Water, such as boats or people, should be tested first with a small sample of liquid E-Z Water. These plastic items may be melted by the E-Z Water.

Pouring E-Z Water: Melt the E-Z Water pellets in a clean, dry disposable tin can because the residue is difficult to remove. A Teflon coated pan can also be used. E-Z Water can be removed from the Teflon, but may stick to the outside of the pan. Caution: E-Z Water is very difficult to remove if spilled Use a burner, oven, or toaster oven to melt it quickly at a high temperature (approximately 400°). E-Z Water can be re-melted if it hardens before pouring. Smoking indicates the E-Z Water is too hot. Although not dangerous, the temperature should be reduced. You may want to use a disposable non-melting utensil such as a tongue depressor, craft stick, dowel rod, or old spoon (not plastic) to gently stir the E-Z Water. This will help distribute the heat and promote quicker melting. Alternative heat sources such as a heat lamp, Sterno stove, or propane stove will also work. Do not add any liquids to E-Z Water. They will not mix with the plastic and could erupt in a dangerous manner. Caution: the heated material is hot enough to severely burn your skin.

As soon as the pellets are liquid, pour into the prepared area on the layout. If the E-Z Water hardens before pouring, just re-melt. The pellets are nearly colorless when melted but they will darken slightly if continuously exposed to heat in a melted form for more than 15 minutes. E-Z Water will harden in just a few minutes, depending on how deep it is poured. One package of E-Z Water will cover approximately a 14" diameter circle when poured 1/8" deep.

Repairing E-Z Water: Use a heat gun to remove air bubbles or make any repairs which are needed. Heat guns are available at hardware or home building stores. A heat gun may be used before the E-Z Water has set or after it is completely set. Hold the heat gun approximately six inches from the surface of the E-Z Water and move it continuously in a circular pattern as you remelt the surface. Scratches and cracks are repaired by re-melting the surface with the heat gun,

which allows the scratches to disappear and the edges of the cracks to merge together. A rounded lip may occur along the edges of your body of water where the E-Z Water cooled too quickly. Use the heat gun to blow hot air along the rounded lip and flatten it out.

DETAILING LANDSCAPE

Because of the variety that can be achieved in landscaping a layout, it can be one of the most interesting and exciting parts of building a railroad. As you have progressed through the various parts of this chapter, your skills in observing real landscape items should have increased. The end result is that even after "completing" the landscape portion of the layout, you will notice additional ways to use the products. Feel free to back up and add additional landscape items, or find new ways to use the products. This is known as detailing the landscape, that is, adding more detail after the initial landscaping is in place.

Since few, if any, model railroads have too much landscape material, check to see if a little more color, a little more texture, or a little more variety in landscape materials is needed. Additional Turf, Talus and trees can easily be added on top of what is already in place. The more texture on the layout, the more interesting and the more realistic it will appear. If the landscape seems to be too even in tex-
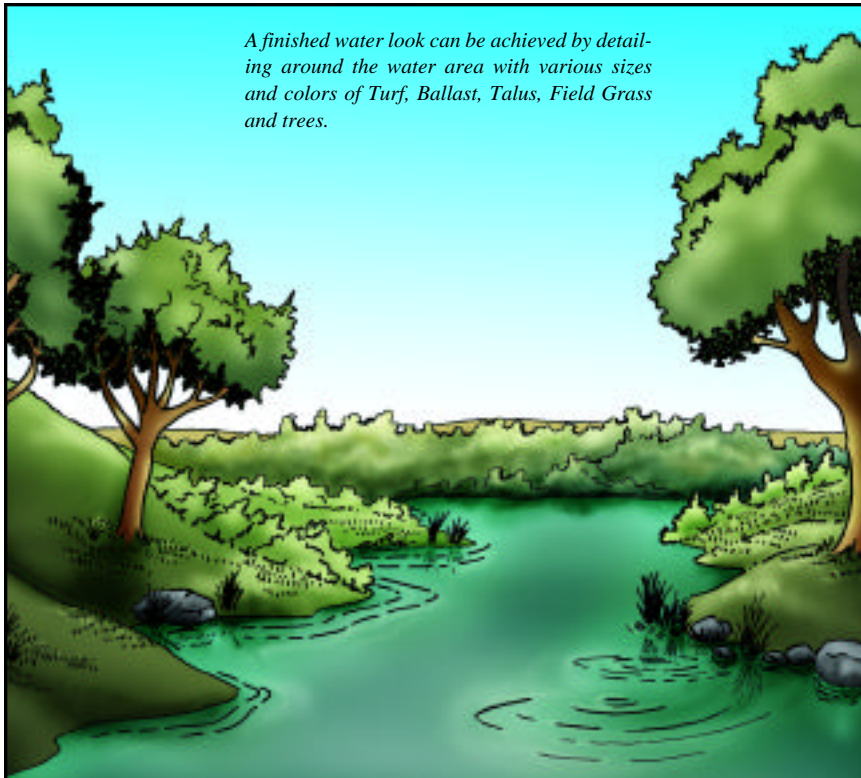
A finished water look can be achieved by detailing around the water area with various sizes and colors of Turf, Ballast, Talus, Field Grass and trees.

ture, add some more Coarse and Underbrush or put in some more bushes with Clump-Foliage, Foliage Clusters, Underbrush, Bushes, Fine-Leaf Foliage, or Lichen. Maybe some more vines and trailing plants are needed. Use some Foliage, Flowering Foliage or Poly Fiber and look for more areas where these items might grow. Add some Flowers in selected spots, perhaps around a stream or in an open field where wild flowers would grow. Be sure to plant clumps of Field Grass beside track, near water areas, and in open areas. Any additions made to the landscape at this point should enhance the realism of the scene and provide a better backdrop for your trains.

Maybe your layout has been around a few years and the landscape materials are starting to look shabby. Renew the whole look of the layout with a fresh application of Turf, some additional Clump-Foliage or Foliage Clusters, Underbrush, Bushes, Fine-Leaf Foliage, new trees and perhaps a water area that did not exist before.

Look critically at all areas of the layout for places where some detail items would really make the scenery appear more realistic. Take a look at the rock outcropping areas you have created. In the real world, vegetation seeks every possible place to put down roots. Mist the rock faces with Scenic Cement and add small amounts of Turf or small pieces of Foliage Clusters on ledges and in crevices. The dirt and grime, which appears on rocks can be modeled with Fine Turf in Soil color in a flyspeck technique. Lightly mist the rock face with Scenic Cement. Place a small amount of Soil colored Fine Turf on a sheet of paper which has been bent into an L-shape. Hold the paper near the rock face and lightly blow air onto the paper to puff flyspecks of Soil onto the rock faces. When you achieve the look you want, lightly mist with Scenic Cement to hold in place.

No matter how severe the terrain, there are almost always trees trying to find a way to grow out of rock faces. Fine-Leaf Foliage is appropriate for modeling saplings trying to get a start like this. Drill a hole in the face of a rock outcropping. Fine-Leaf Foliage that has curved stems lends itself to this application. Insert the stem with the curve up, to model upward growth out of a rock. Glue the Fine-Leaf Foliage to the rock outcropping and add some Clump-Foliage to the base to hide where the tree was glued into place.

Woodland Scenics Field Grass is another item that can be used to provide very realistic vegetation for rock areas. Small tufts of grasses can be added on a rock

TECH TIP

Even with a completed layout, rock outcroppings, field rocks and boulders can be added. Cast these rocks with Lightweight Hydrocal and color with the Earth Color Liquid Pigments to match existing rock. Then add them to the layout attaching with Lightweight Hydrocal or Scenic Glue to any other surface. Add some landscape materials to blend the new rocks into the rest of the scenery.

ledge and around the edges of a rock outcropping. Almost any surface rock, boulder, or field rock would have clumps of Field Grass growing around it. Around the bottom of tunnel portals or retaining walls is another likely location for clumps of Field Grass.

Field Grass is also useful in detailing other areas of the layout. It can give a feeling of abandonment or neglect to sections of the railroad. Field Grass would almost surely be growing between the rails and around the track area of an abandoned siding. It would be seen in industrial and mining areas where the grounds are not landscaped or tended. Virtually any fence would have some tufts of Field Grass around it, as would the supporting poles for a billboard or sign posts.

These detailing items are not difficult to add to the layout. What is mostly required is good observation of the real world and practice in using the Woodland Scenics products to produce the desired effects.

Woodland Scenics Soft Flake Snow is a great way to add a realistic appearance to your layout. Snow comes in a 32 ounce Canister Shaker and is great for modeling light dustings of snow, or heavy drifts. Spray area you want to cover with Scenic Cement and sprinkle snow. Then re-spray with Scenic Cement.

To create heavy drifts, use a small brush to apply Flex Paste to your layout where you want your snow. While the Flex Paste is still wet, sprinkle it with Snow and then let dry.

BALLAST THE TRACK

Provide extra stability for ties and rail as well as a realistic look by installing Woodland Scenics Ballast on all track areas. Pour Ballast down the middle of the track and spread with a dry paintbrush. To attach the Ballast, mist lightly with Woodland Scenics Scenic Cement, then thoroughly soak the Ballast with Scenic Cement. Be sure to clean off the rail when the glue is dry. Or, use an eyedropper to provide a clean application. To review this section, see page 66.

ADD TALUS (ROCK DEBRIS)

Woodland Scenics Talus (rock debris) should be added in all areas around rock outcroppings and mountains as well as in and around water areas. Talus is also seen on top of and around the bottom of tunnel portals and retaining walls. Place the smaller sizes of Talus first with the larger sizes on top. Add another layer of Fine Talus. Spray with wet water, then use an eyedropper to apply Scenic Cement on top of the Talus. To review this section, see page 68.

BUILD ROADS

Build roads to connect towns, provide access to businesses and industries, and allow people to get to their homes. If a road area has not been formed during initial contouring, use cardboard strips or Mold-A-Scene Plaster to provide a flat surface. Cover with strips of Woodland Scenics Plaster Cloth or apply Woodland Scenics Lightweight Hydrocal and sand if needed for smoothness. You can also use the quick and easy Woodland Scenics Road System, which includes Paving Tape, Smooth-It and Asphalt and Concrete Top Coats. In the larger scales, apply Ballast to make a gravel road. In the smaller scales, make a gravel road by painting with Earth Color Liquid Pigment Concrete and lightly sprinkling some Earth Fine Turf into the wet Pigment. Paint with Earth Color Liquid Pigment Concrete or Slate Gray to make concrete or asphalt roadways. Add detailing in the form of ruts, cracks, or tire tracks. To review this section, see page 69.

CREATE LOW GROUND COVER

Paint or stain all remaining open areas with Woodland Scenics Undercoat Pigments in Green Undercoat or Earth Undercoat. Sprinkle a uniform coat of Woodland Scenics Blended Turf on these painted areas using Scenic Cement as an adhesive. Use the six colors of Woodland Scenics Fine Turf to add additional color and detail to these areas. Create darker and lighter highlights which are blended into the base coat of Blended Turf. For realism, blend color with salt and pepper, dry brush, and flyspecking techniques. Create dirt roads and paths by surfacing those road areas with Earth or Soil colored Fine Turf. To review this section, see page 71.

MEDIUM GROUND COVER

Texture in the form of plants of different heights should be added with Woodland Scenics Coarse Turf, Fine-Leaf Foliage, Bushes and Underbrush, using several varieties of colors. Blend these products into the previous layers of Fine Turf and Blended Turf. Model ivy, vines, and other medium level plants with Woodland Scenics Poly Fiber, Flowering Foliage and Foliage. Pull and stretch these products to a thin sheet and attach to the layout with Scenic Glue. To review this section, see page 74.

HIGH GROUND COVER

Continue adding more texture with Woodland Scenics Clump-Foliage, Fine-Leaf Foliage, Foliage Clusters, Underbrush, Bushes and Lichen used as bushes and shrubs. Pull off pieces of different sizes and plant them in clumps and groupings around the layout. Detail these bushes with dustings of Fine Turf for variety in color and texture. Add random clumps of Woodland Scenics Field Grass in both wet and dry areas to model tall grasses and weeds. To review this section, see page 76.

PLANT TREES

Finish the ground cover by planting trees. Use Woodland Scenics Ready Made Realistic Trees for quick easy trees which are highly detailed and realistic. Woodland Scenics Realistic Tree Kits and metal trunk Tree Kits allow you to shape the armatures and foliate the trees to your own liking. Woodland Scenics Realistic Tree Kits give your layout the ultimate look of realism. Fine-Leaf Foliage models saplings, bushes and shrubs. You can use our Tree Armatures for making a wide variety of great-looking trees. Using our many tree foliage products, you can create many sizes and species of trees on your layout. Use these tree kits as specimen plantings in the front of other trees for your layout. Plant any of these trees by poking a small hole in the layout base and inserting the pin on the tree trunk. Attach with Scenic Glue. To review this section, see page 81.

POUR BODIES OF WATER

The easiest way to model pooled water and rapid, moving water is with Woodland Scenics Realistic Water and Water Effects. The simple, one-pour application makes our Realistic Water the perfect way to model water on your layout. Water Effects adds waterfalls, rapids, whitecaps, splashes and other water movement to your layout.

Use Earth Color Liquid Pigments or any water-soluble paint to achieve a realistic color. Add landscape materials to model the plant growth on the bottom of ponds and lakes. To review this section, see page 88.