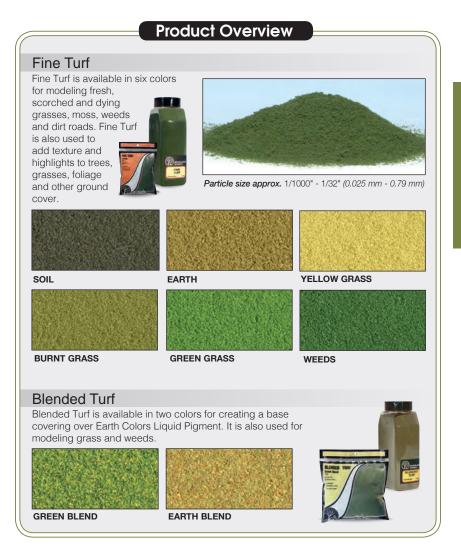
# **VEGETATION**

Once the rock and terrain colors have dried, your layout is ready for plant life, such as grass, bushes, shrubs, vines and more. Unless space is reserved for buildings, all open areas where the plaster or terrain base is visible can be covered with some kind of vegetation or soil. You can add vegetation to rocks, Tunnel Portals and other features to model moss and vines. Vegetation can also be used to cover up design and construction flaws on your layout.

All of the following options for vegetation can be used for any scale and blend naturally. They are also colorfast, which means the color will not fade over time.



#### Coarse Turf

Coarse Turf is available in 11 colors for modeling any season. Use it to model low grasses, leaves

and weeds. Coarse Turf creates a smooth transition between different heights of ground cover and adds texture and highlights to trees and scenery.



Particle size approx. 1/32" - 1/8" (0.79 mm - 3.17 mm)









DARK GREEN

LIGHT GREEN

**FALL YELLOW** 

MEDIUM GREEN





**FALL ORANGE** 

FALL RED

**FALL RUST** 

CONIFER

#### Static Grass Flock™

Static Grass Flock is available in six colors and stands upright when applied with the Static King. It is a fiber product that is used for modeling grass and weeds. Use it under trees, along ditches or as forest litter.











WILD HONEY





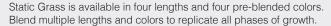
LIGHT GREEN

**MEDIUM GREEN** 

**DARK GREEN** 

#### Static Grass

Static Grass is a material that stands upright when applied with the Static King. Use Static Grass to model fields and other tall grasses.





Scale	2mm Static Grass	4mm Static Grass	7mm Static Grass	12mm Static Grass
N (1:160)	1' (30 cm)	2' (61 cm)	4' (122 cm)	6.5' (198 cm)
HO (1:87)	7" (18 cm)	1' (30 cm)	2' (61 cm)	3.5' (107 cm)
O (1:48)	4" (11 cm)	8" (20 cm)	1' (30 cm)	2' (61 cm)



#### Underbrush

Underbrush is available in six colors. Use Underbrush to model smaller bushes and shrubs.



Particle size approx. 1/8" - 5/16" (3.17 mm - 7.93 mm)



### Poly Fiber

Poly Fiber is a synthetic fiber used to model shrubs, vines, undergrowth and other rambling vegetation. Apply Poly Fiber to the sides of buildings, Tunnel Portals, Street Lights, Billboards, along Fences or other places you see vines grow.



#### **Bushes**

Bushes are available in six colors. Use Bushes to model larger bushes, hedges and shrubs.





Particle size approx. 5/16" - 1/2" (7.93 mm - 12.7 mm)





LIGHT GREEN



**OLIVE GREEN** 

DARK GREEN





Flowering Foliage™ Flowering Foliage is available in two colors. It is a fast and easy way to model wildflowers and flowering fields, vines, bushes and shrubs.







YELLOW

**PURPLE** 

#### Field Grass

Field Grass is a fine, natural product that models tall grasses, tufts of grass and weeds. It is colorfast and available in four natural colors.









NATURAL STRAW

HARVEST GOLD

MEDIUM GREEN

### Fine-Leaf Foliage™

Fine-Leaf Foliage is a natural product that is available in six colors. Its fine leaf detail adds a new dimension to any layout and is great for modeling bushes, saplings, shrubs and hedges or making exquisite trees. A Tree Armature sample is included in each package.







**DARK GREEN** 











**OLIVE GREEN** 

**DEAD FOLIAGE** 

**FALL MIX** 

#### Lichen

Lichen is a natural material with a unique texture used to model vines, shrubs, hedges, small bushes, underwater

vegetation and other undergrowth. It is available in six colors for modeling any season.





















**AUTUMN MIX** 

**NATURAL** 

**LIGHT GREEN MIX** 

**DARK GREEN MIX** 

### Clump-Foliage™

Clump-Foliage is available in six colors. Mix and match with other foliage to create variation in trees, shrubs and bushes and to landscape hillsides. Clump-Foliage is colorfast and works for all scales.





Particle size approx. 1/8" - 1 1/2" (3.17 mm - 3.81 cm)







**BURNT GRASS** 



**CONIFER GREEN** 

FALL MIX

# Foliage

**DARK GREEN** 

Foliage is available in six colors. It is excellent for making trees, vines, weeds, bushes, hedges or any low growth.











LIGHT GREEN



DARK GREEN



LATE FALL

**CONIFER GREEN** 

**EARLY FALL** 

Foliage Clusters™

Foliage Clusters are available in three colors. Break Foliage Clusters into any size cluster and use it to model bushes, hedges, and shrubs. Foliage Clusters can also be used on hillsides to model tree masses.











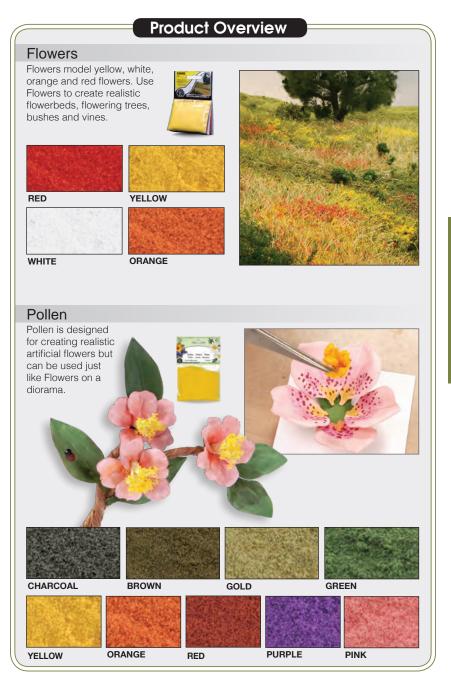
LIGHT GREEN

MEDIUM GREEN

DARK GREEN

### LANDSCAPE ACCENTS

Landscape accents are usually added after trees, bushes and other ground cover. These accents are used to add finishing details or a little extra color and realism to your layout.



#### Fruit

Fruit includes two colors: red and orange. Sprinkle Fruit on tree foliage and ground cover to model fruit and fallen fruit.



RED



ORANGE





#### **Briar Patch**

Briar Patch is a natural material that makes it simple to model brambles, thickets and shrubbery. It is available in two colors and ready to use straight out of the package.

#### Patented



**DRY BROWN** 



MEDIUM GREEN



#### Plant Hues

Plant Hues model the appearance of seed heads and create a subtle, variegated appearance for realistic fields and meadows. Use Plant Hues to emphasize contours with highlights and shadows. Plant Hues include four colors:

Golden, Wheat, Shadow Green, and Red Switch.







GOLDEN WHEAT



SHADOW GREEN



**RED SWITCH** 

### Stumps

Cut Stumps and Broken Stumps are lead-free metal castings that are easy to paint and attach to a layout. Use these stumps along rivers, on the edge of a field or to model deforested areas from logging





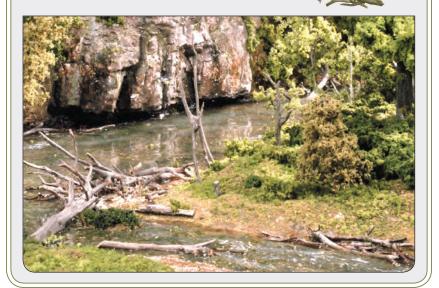


JT STUMP BROKEN



### Dead Fall

Dead Fall is a natural, realistic product for modeling dying and decaying wood. It has the look of aged wood with gnarled branches, knots and some smooth, weathered pieces. Use Dead Fall in water areas to replicate flooded timbers or logjams on a river, on hillsides or in swamps to model fallen timber and debris. Dead Fall can also be submerged in water features (pages 180-181).



### ATTACHING VEGETATION ONLINE VIDEO

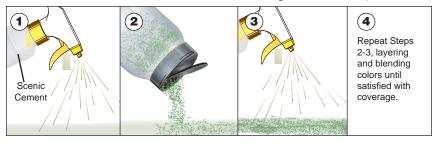
The way you attach vegetation on your layout will vary depending on the type of vegetation you are using, as well as the effect you wish to achieve. This section is divided by adhesive and technique. Different products and techniques require different adhesives, so be sure to consult your product instructions to see which adhesives are recommended.

### Attaching with Scenic Cement

Scenic Cement is ideal for attaching Fine Turf, Blended Turf, Coarse Turf, Static Grass Flock, Flowers, Plant Hues and Fruit. There are a few different ways you can use Scenic Cement to attach these products.

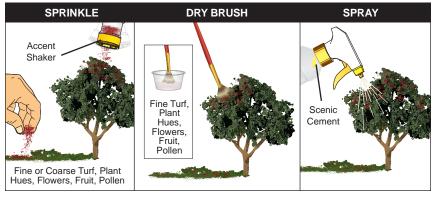
#### Attaching Ground Cover

To model ground cover, evenly spray the area you want to landscape with Scenic Cement. Then sprinkle Fine Turf, Blended Turf or Coarse Turf over Scenic Cement. Finish with another even mist of Scenic Cement. Add additional layers and colors by repeating this method. If the previous layer is still wet from the top spray, you do not need to spray it again. Just sprinkle the next layer of Turf over it and mist again with Scenic Cement. You can also use this method to attach Static Grass Flock when using it as a landscape accent.



#### Highlights and Accents

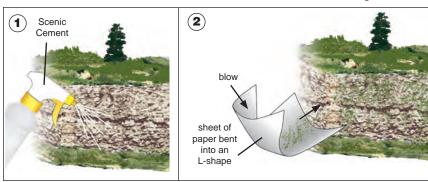
To accent an area with highlights, low lights or subtle color variation, simply sprinkle or drybrush Fine Turf, Blended Turf, Coarse Turf, Plant Hues, Flowers, Pollen or Fruit over the desired area. Then spray the area with Scenic Cement. To drybrush, dip a dry paintbrush in the Turf or Fruit and brush it on the area. The dry brush method is particularly useful when adding color variation to vegetation such as Underbrush, Bushes, Clump-Foliage, Fine-Leaf Foliage, Poly Fiber and Lichen.



Flyspecking

Flyspecking is a method of applying Fine Turf or Blended Turf that recreates the effect of having vegetation or soil on vertical terrain and rock faces. You could also use this for moss on the side of a building. This method creates exceptional realism in these areas by adding detail and texture, suggesting holes and porosity in the rocks or terrain.

To flyspeck, start by lightly misting the area with Scenic Cement. Then bend a sheet of paper into an L-shape. Place the Turf on the horizontal section of the paper. Position the horizontal section of the paper close to the vertical area and gently blow air down the vertical section of the paper. Turf will fly off of the paper and stick to the vertical terrain feature. Mist the area again with Scenic Cement, if needed. For the most realism, use minimal amounts of vegetation.



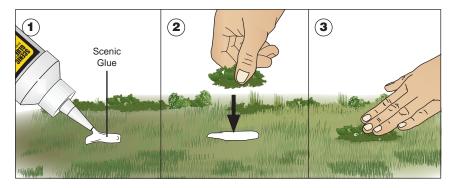
### Attaching with Scenic Glue

Larger vegetation should be secured with Scenic Glue. This includes Underbrush, Bushes, Clump-Foliage, Foliage Clusters, Fine-Leaf Foliage, Poly Fiber, Flowering Foliage, Lichen, Field Grass, Briar Patch, Cut Stumps, Broken Stumps and Dead Fall.

There are two general ways to use Scenic Glue.

### Option 1

Apply Scenic Glue directly to your layout in the area you want to apply vegetation, and then place the vegetation in the Scenic Glue. Push the product into the glue for a good bond.



#### Option 2

Place a little Scenic Glue in a disposable cup or on a non-porous surface. Dip the vegetation in the glue and place it on the layout. You may need to hold the product in place until the glue begins to set.

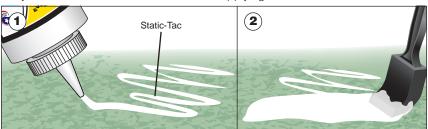


### Attaching with Static-Tac

Static-Tac is primarily used to attach Static Grass. It can also be used to secure Briar Patch and similar products in grassy areas. Static-Tac can be applied directly to the terrain shell or over preinstalled landscaping products including Fine Turf, Blended Turf, Coarse Turf, Ballast and Talus.

#### Apply Static-Tac to the Terrain Shell

Gently squeeze Static-Tac onto the terrain shell. Then use a foam brush or bristle paintbrush to spread it anywhere Static Grass or Briar Patch is desired. Static-Tac will dry quickly. For longer application time and the best adhesion, do not brush Static-Tac out so thin that it becomes completely transparent. You want it to be a milky white color on the terrain shell before applying Static Grass or Briar Patch.



#### Attach Briar Patch

Press pieces of Briar Patch into the Static-Tac. Allow Static-Tac to dry before moving the diorama.



#### Attach Static Grass to the Terrain Shell

Use the Static King (following all instructions) to apply Static Grass or Static Grass Flock over Static-Tac. The electrical field the Static King produces will shoot Static Grass into the Static-Tac so that the Static Grass stands upright. Use the Model-Vac to remove excess Static Grass from the application area, or simply turn the diorama over.

To thicken the application, shake more Static Grass over the first application while the adhesive is still wet. You can also apply different colors or heights of Static Grass while the adhesive is wet. For dense undergrowth, apply shorter (and darker) colored Static Grass over taller Static Grass that is already installed.



#### Attach Static Grass to PreInstalled Landscaping Materials

Static Grass is designed to attach directly to Fine Turf, Coarse Turf, Ballast and Talus that have already been installed on the layout. This allows modelers to accent existing layouts with Static Grass and is an excellent way to blend colors and textures. To install, soak the preinstalled landscaping material with Static-Tac. Wait a few seconds; the Static-Tac will spread through the dry material on its own. Once the area is wet, apply Static Grass with the Static King. Do not turn your diorama over or some landscaping material might detach from the terrain shell. Use the Model-Vac to remove the excess, or wait until the Static-Tac is completely dry to remove the excess.

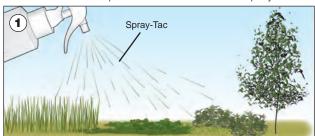


### Attaching with Spray-Tac

Spray-Tac is applied in a fine mist that is ideal for attaching items that are very fine, such as Plant Hues and Flowers. It also has enough body to be used to thicken or increase the height of a pre-installed application of Static Grass after the base adhesive has dried. Spray-Tac can also be used to apply Static Grass over preinstalled landscaping materials, such as Fine Turf, Blended Turf, Coarse Turf, Ballast or Talus. Simply saturate the material and apply.

#### Attach Plant Hues and Flowers

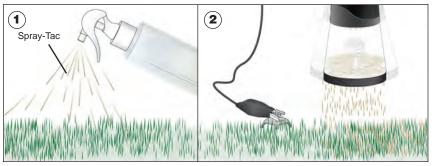
① Use Spray-Tac to mist the areas you wish to accent with Plant Hues and Flowers. ② Sprinkle Plant Hues and Flowers over the Spray-Tac. For heavy applications, seal Plant Hues and Flowers in place with another coat of Spray-Tac.





#### Thicken Pre-Installed Static Grass

Use Spray-Tac to make pre-installed, dried Static Grass patches thicker, taller or change the color. Mist the dry Static Grass patch with Spray-Tac, coating the area thoroughly. Apply new Static Grass over the wet Static Grass. Let it dry before removing excess. Do not use Spray-Tac as the base adhesive directly on the terrain shell.



### Attaching with Tuft-Tac

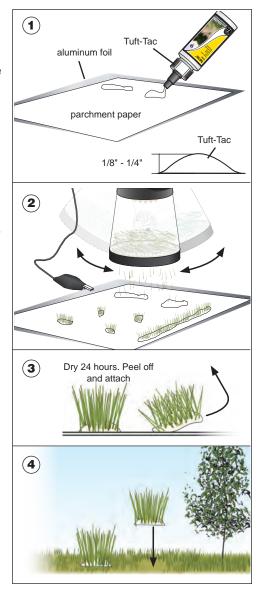
Tuft-Tac is specially formulated for making Static Grass or Field Grass tufts. Tufts have a sticky base that allows them to be peeled up and individually placed where desired. Tufts are a fast and easy way to add clumps and strips of grass anywhere on a layout. Use tufts to accent gravel roads, railroad tracks and hard to reach places. Tuft-Tac is also used to attach Plant Hues, Flowers and Static Grass to the tips of preinstalled Static Grass for exceptionally realistic seeding and flowering grasses and weeds. It can also be used as a base adhesive.

#### Static Grass Tufts

Lav a piece of parchment paper (not wax paper, only baking parchment paper) over a piece of aluminum foil or a metal cookie sheet. Squeeze drops or strips of Tuft-Tac onto the parchment paper. The Tuft-Tac should be between 1/8"-1/4" thick. Attach the Alligator Clip on the Ground Wire to the aluminum foil or cookie sheet and use the Static King to apply Static Grass to the Tuft-Tac. Turn the parchment paper over and shake off the excess Static Grass. Apply more Static Grass for thicker coverage.

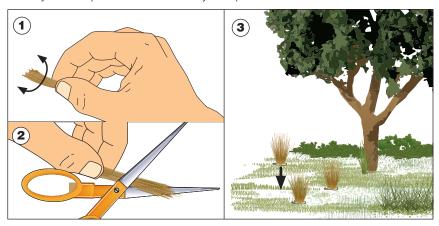
Allow Tuft-Tac to dry a minimum of 24 hours or until the adhesive has dried translucent. You can place a fan on the tufts to encourage drying. Turn the parchment paper over to check if Tuft-Tac has dried. If any white is visible through the parchment paper, the tuft is not dry.

Once dry, gently peel the tufts or grass strips from the parchment paper. Press the tuft onto the colored plaster terrain shell where desired. On landscaped layouts, scrape away any Turf or landscaping and spread a small drop of Tuft-Tac onto the application area to firmly secure the tuft. For efficiency, we recommend making several tufts at one time. Any tufts that won't be installed immediately should be left on the parchment paper for use at a later date.



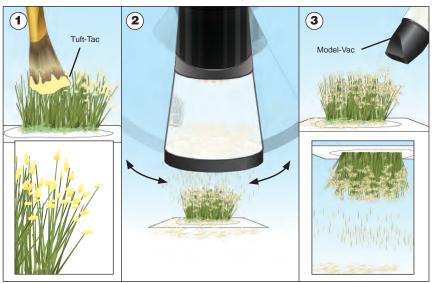
#### Field Grass Tufts

Pull a small bunch of Field Grass from the package. Roll the tuft between your fingers to make the tips of the Field Grass uneven. While holding the tuft, trim the Field Grass to the desired height. Dip the cut end of the tuft into Tuft-Tac (Scenic Glue and Hob-e-Tac can also be used) and plant on the layout as desired. Field Grass tufts can also be placed on a piece of parchment paper so they can be peeled off individually and placed at a later date.



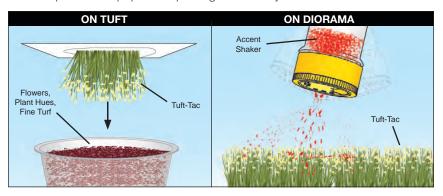
#### Seeding Grasses and Weeds

Once dry, Tufts can be accented with Static Grass or Plant Hues to create the effect of seeding grasses or weeds. Dip a small bristle paintbrush in Tuft-Tac and brush a very small amount of adhesive onto the tips of the Static Grass or Field Grass tufts. You do not need to cover the top of the whole tuft; the effect is best when only a few blades of grass are accented. Then, use the Static King to apply the Static Grass or Plant Hues. Immediately turn the parchment paper over to remove the excess. Let Tuft-Tac dry a minimum of 15 minutes before removing the tuft from the parchment paper and placing it on the layout.



#### Flowering Grasses and Weeds

Follow the instructions for Seeding Grasses and Weeds to apply Tuft-Tac to the tips of a Static Grass or Field Grass tuft. Then, fill a disposable cup with Flowers or Plant Hues and dip the adhesive-coated tips of grass into Flowers or Plant Hues. You can also sprinkle on the Plant Hues or Flowers for lighter coverage. Let Tuft-Tac dry a minimum of 15 minutes before removing the tuft from the parchment paper and placing it on the layout.



#### Tuft-Tac as a Base Adhesive

Tuft-Tac can also be used to attach Static Grass and Briar Patch directly on the terrain shell, just like Static-Tac. As it dries, Tuft-Tac remains flexible and tacky. Its flexibility allows a modeler to create a windswept look or striped patterns in lawns after Tuft-Tac has fully dried. Apply Static Grass over Tuft-Tac just as you would with Static-Tac and let it dry. If a windswept look or striped pattern in a lawn is desired, use the thatch comb to comb the Static Grass into the desired pattern. This method can also be used on hillsides.



## BASIC LANDSCAPE APPROACH

A natural landscape has vegetation of various sizes, shapes, colors and elevation. Environmental factors like water or sunlight can impact the appearance. For example, grass that is close to a water source may be a dark, vibrant green that slowly becomes lighter or even straw-colored the further it grows from the water. Keep these variables in mind when choosing colors and placing vegetation on your layout.

Now that you know how to attach vegetation to the terrain shell, we will go over how to blend the different types of vegetation together for realistic results. Later in the chapter, you will learn how to choose products to create specific types of biomes like forests (pages 152-155), grasslands (pages 156-163), deserts (pages 164-169) and water areas (pages 171-189).

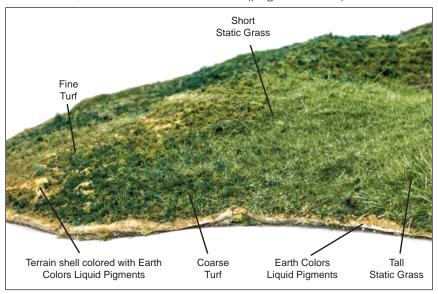


### **GROUND COVER**

Ground cover products like Fine Turf, Coarse Turf and Static Grass are used to model soil, grass and small weeds or plants. Ground cover should be applied over areas that are not reserved for roads, tracks, industries, buildings and water features. Begin creating ground cover by adding Fine Turf to the terrain shell. Fine Turf will blend with the terrain colors and create a dynamic, layered base for other vegetation to grow. Start with thin applications to allow the terrain shell or previous layers to show through and blend with the new layer. Experiment with different colors. If you think you have put on too much of one color, simply cover it with another color.

Coarse Turf represents small weeds and plants that are common around buildings, on mountains and hills, or along roads, railroad tracks and streams. Apply Coarse Turf over the initial layer of Fine Turf and arrange it in patches to represent weeds and other plants. Use it anywhere ground cover would be more overgrown. Start with darker colors and then use lighter colors to accent darker colors.

Static Grass represents medium height grass and weeds. When applying it directly to the terrain shell, use a thick application to avoid the terrain shell from showing through the Static Grass. For thick applications, remove excess with the Model-Vac (or flip the model over to dump) and keep shaking Static Grass over wet adhesive until it is filled. If the base adhesive is dry, use Spray-Tac to add density. Layering Static Grass over Fine, Blended and Coarse Turf is an excellent way to blend colors and textures, make dense grassy areas and create incredible realism on your layout. For more information about Static Grass, see Fields and Grasslands (pages 156-163).



### **CREATING UNDERGROWTH**

Once the ground cover is finished, it is time to add larger vegetation or undergrowth. Undergrowth includes shrubs, bushes, field grass, brambles and vines. Products that model low to high undergrowth include Underbrush, Bushes, Clump-Foliage, Field Grass, Fine-Leaf Foliage, Briar Patch, Lichen, Foliage Clusters, Foliage, Flowering Foliage and Poly Fiber.

All of these products can be pulled apart and broken into smaller sizes or stacked to create the shapes you need. They can be added to pre-existing layouts at any time. For new layouts, begin adding smaller-sized vegetation first, then larger. This will allow you to continue building layers of color and texture. To enhance realism, use various colors of each product to show various stages and types of plant life.

	UNDERGROWTH
Underbrush	Model bushy weeds and plants beneath shrubs     Camouflage building foundations or terrain construction flaws
******	Most realistic when applied in bunches or clumps
Bushes and Clump-Foliage	<ul> <li>Model medium to high undergrowth</li> <li>Place against underbrush to create texture and height variation</li> <li>Apply Bushes first, then the larger Clump-Foliage</li> </ul>
Foliage Clusters	<ul> <li>Largest undergrowth products</li> <li>Layer different colors to blend landscape</li> <li>Stack for height variation</li> </ul>
Lichen	<ul><li>Unique texture</li><li>Model bushes with fewer leaves</li><li>Make brushy areas or tree masses</li></ul>
Poly Fiber, Flowering Foliage and Foliage	Create vines and low undergrowth  Poly Fiber- model vines with smaller, delicate stems Separate layers and stretch until thin and lacy Add Fine/Coarse Turf with Scenic Cement to adjust color and texture Twist and stretch to make thin, hanging vines like on cliffs
	- Flowering Foliage- model flowering plants  - Place along roadsides, near railroad tracks, etc. for instant pop of color  - Foliage- comes in dense sheet  - Trim into hedge-like bushes  - Stretch until thin and lacy for ivy
Briar Patch	<ul> <li>Pull apart to create small brambles and install with Static-Tac</li> <li>Create thorny brambles in fields         <ul> <li>Spread Static-Tac and press Briar Patch in place</li> <li>Apply Static Grass immediately before Static-Tac dries</li> </ul> </li> <li>Scatter excess crumbles under trees and seal with Scenic Cement</li> </ul>
Fine-Leaf Foliage	<ul> <li>Model a variety of shrubs, bushes and saplings with branches</li> <li>Strip smaller branches and place in piles to create thickets, hedges or brush</li> <li>Remove lower leaves from stem to create saplings</li> </ul>

### LANDSCAPE ACCENTS

Dead Fall, Cut Stumps, Broken Stumps, Flowers, Pollen, Fruit and Plant Hues accent landscape features that are already installed. Accenting your landscape will be one of the last things you do to your layout. Use these products after all large landscape items have been added.

Accent forests and other areas where trees are located with debris like broken limbs, rotting logs or tree stumps. Cut Stumps simulate sawed trees. Install Cut Stumps anywhere a farmer might need to clear his land or in cities where a large tree may have endangered surrounding buildings. Broken Stumps are more naturally broken and model trees that died from natural causes. Install Broken Stumps at the edges of forests and in tree clumps. Dead Fall simulates broken limbs and weathered, rotting logs in forests. Install these where visible in forests and anywhere there may be tree debris. Use Dead Fall anywhere a tree is installed and in waterways to show debris left behind by flooding or logging (page 181).

Many landscapes have small pops of color in the form of flowers. Sprinkle Flowers or Pollen on your layout anywhere some color variation is needed. Plant Hues creates more subtle variation. Use Plant Hues to make subtle color adjustments on Static Grass or other landscaping materials. The colors are more muted than Pollen or Flowers and can create the look of tree pollen. Fruit models fruiting trees, shrubs or bushes. Use Fruit to create orchards and smaller plant life that produces fruit.



# FIELDS AND GRASSLANDS

Grasses are present everywhere from farming pastures, meadows and fields to a golf course or your carefully trimmed lawn. Forest meadows and fields can be overgrown, while farming pastures and lawns are usually more manicured. These areas can be small, but there are also vast grassy areas called grasslands.

There are two types of grasslands—temperate and savannah. Temperate grasslands, like the North American Prairie, teem with several varieties of grasses and flowering broadleaf plants. Few trees grow in temperate grasslands, and the trees that do are usually along waterlines. Unlike temperate grasslands, savannahs are primarily made up of only one or two kinds of grass in one area. Savannahs, like the African Savanna, have scattered deciduous trees and shrubs that grow in groups and tufts.

Grasses in the spring tend to be bright green, with some dead thatch beneath. In the summer, grass stalks become a deeper green and develop seed heads. When seed heads mature at the end of summer, they tend to change colors ranging from rich reds and browns to light straw. The stalks of grass begin to yellow in late summer and throughout fall. Grasses that exist in temperate climates die back during winter and turn straw and brown colors.

Consider the location and season of your model when choosing products and colors to create grassy areas. The same methods to make a prairie are also used to make a small lawn or golf course.



### **BLENDING**

There is rarely one height and color of grass in a given area. Think of a pond. Grass near the water line tends to be a darker green than grass on the hillside nearby. Even the green grasses next to the water line have slight color and height variation. This happens everywhere due to inconsistencies in available nutrients, the amount of available water, how much sunlight is received and even different varieties of grasses. There are two general techniques that can be used to blend colors and heights in grassy areas.

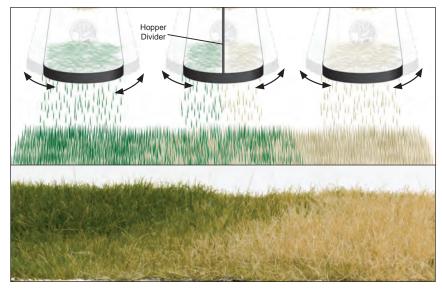
### Blending with Base Adhesive

Use the base adhesive to control where different heights and colors are applied. To do this, apply the base adhesive in one patch. Then add one color or length of Static Grass over that patch. Apply more adhesive, pushing it into the edge of the already installed Static Grass. Add the second color or height over the second patch of adhesive. Continue this pattern until you have a whole field or lawn covered. This method will create a blended appearance and is great for controlling where Static Grass is installed.



### Blending with Hopper Divider

Using the hopper divider, load two different heights or colors of Static Grass in the Static King hopper, and apply it in one area. This is a quick way to create realistically blended grasses.



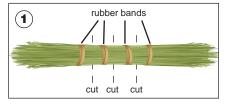
### MODELING TALL GRASSES ONLINE VIDEO

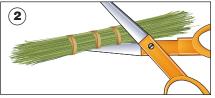
Temperate grasslands and savannahs contain very tall grasses that can grow from 4'-10'. Try using Field Grass when you need to model exceptionally tall grasses.

Field Grass is ideal for modeling tufts of tall grass and is approximately 2 1/2" to 3" long. Field Grass can be trimmed to any length. The colors of Field Grass are different than Static Grass and can be mixed together to create variation within an individual tuft of grass. Field Grass can be used to create an entire field, accent Static Grass in

the field for texture and color variation, or simply add small accents along roads, railroad tracks and buildings.

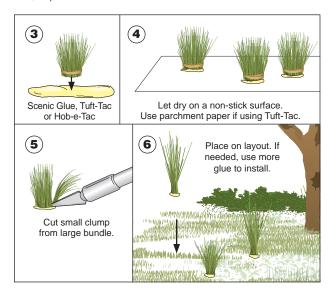
Field Grass can be placed in individual tufts on a layout and attached with your choice of Tuft-Tac, Scenic Glue or Hob-e-Tac (pages 104-105). Individual placement can be time-consuming. To make Field Grass tufts faster, roll a large clump of Field Grass into a bundle. Wrap 3-4 rubber bands





around the bundle, spaced evenly at the approximate height you want the Field Grass. With Scissors, cut the bundle between the rubber bands. Dip the cut ends of Field Grass into the adhesive and place on a non-stick surface (use parchment paper for Tuft-Tac). When you are ready to plant your Field Grass, peel (or cut) off small tufts from the large bundle. If you used Scenic Glue, dip the small tuft into a little more Scenic Glue

and place on the layout. If you used Hob-e-Tac or Tuft-Tac, the adhesive will remain sticky, and the small tuft can be placed on the terrain shell. The bundle of Field Grass does not need to be used immediately but can be used over the course of several months.

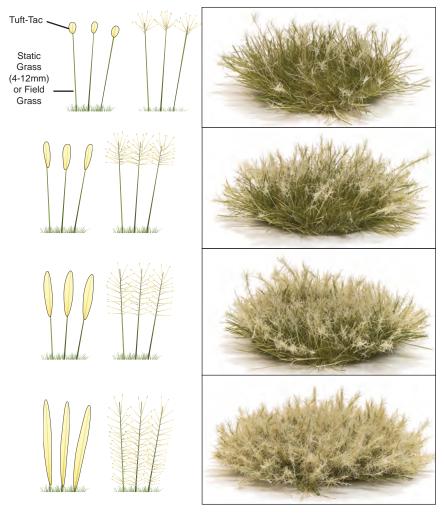


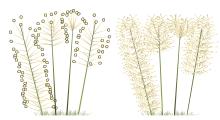
### MAKING/ACCENTING TUFTS WILDER

Most grasses and weeds produce colorful seed heads or small flowers. Red switch is a great example of grass that creates dramatic and colorful seed heads. Other grasses and plants like dandelions produce seed heads that are fluffy and float above surrounding grasses. Cattails are another plant that produce a distinctive seed head. A realistic prairie, meadow or lawn will have these features.

Grasses and weeds in this late stage of development can be modeled with Static Grass and Field Grass tufts (pages 125-126). Tufts are easier to handle and allow you to experiment without permanently installing on your layout.

Different plants can be created by controlling where the Tuft-Tac is applied on the Static Grass blade. Use this chart to help you determine what kind of look you want to create.







Follow these tips to create specific seeding and flowering grasses, or broadleaf weeds and plants.

### Compact Seed Heads (Cattails)

Attach Plant Hues to the tips of Static Grass or to Field Grass. This will create tightly bound seed heads that are close to the grass or plant's stalk.

This technique is great for making cattails. To create a cattail brown, mix 1/4 tsp of Golden, 1 1/2 tsp of Red Switch, and 2 tsp Shadow Green Plant Hues together in a clear plastic bag. Apply a small amount of Tuft-Tac on the tips of the tuft. Then use the Static King to apply this mixture to the premade tuft, or leave it in a cup and dip the tuft in the mixture.



### Fluffy Seed Heads

For seed heads that are fluffy and appear to float above low-growing grasses, use 2mm Static Grass attached to Field Grass or 4-12mm Static Grass. 2mm Straw is recommended for dry grasses nearing the end of their life cycle. For a floating appearance, create a tuft with 4mm-7mm as undergrowth and 12mm as the top growth. Paint the Tuft-Tac onto the top most tips of the grasses. Then apply the 2mm to the tips of the grass tuft. If you prefer a bushier look, paint the Tuft-Tac farther down the Static Grass stalk.

### Branch-Like Stalks

For broadleaf weeds and plants that appear to have branch-like stalks at the top, use 2mm, 4mm or 7mm Light Green, Medium Green and Dark Green. The larger the Static Grass, the more weed and plant-like the tuft will appear after application. Once this layer of Static Grass has dried, add additional layers to create even taller branch-like stalks.



### **Blooming Plants**

To model blooming plants, use Plant Hues and Flowers to accent 2mm Static Grass already installed on the tips of a tuft. This creates the effect of seed clusters and flowers on branchy plants.

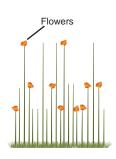


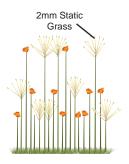
### Overgrown Grass and Large Flowering Plants

Attach 12mm Static Grass to the tips of other pre-installed Static Grass to make the application taller and more overgrown. Layer more Static Grass, Plant Hues and Flowers to create large flowering plants or very tall grasses.

### Flowers and Seed Heads

To create flowers and seed heads, dab Tuft-Tac glue only on some of the tallest Static Grass stalks. Dip these stalks into Flowers or Plant Hues. Let it dry, and then paint Tuft-Tac on other tall grass stalks. Apply 2mm Static Grass on those tips. The effect will look like flowers growing up through seeding grasses.







### Small Broadleaf Plants

Paint Tuft-Tac over a very thin tuft of Field Grass, almost down to the base adhesive. Then dip the whole Field Grass tuft into Coarse Turf. The Field Grass tuft will resemble small broadleaf plants and saplings.



### CREATING REALISTIC VARIATION

Brambles and broadleaf plants create natural variation in grassy areas. Savannahs and temperate grasslands are both known to have broadleaf plants. Meadows, fields and lawns all have plants like shrubs, bushes and brambles living in and around them. To create this kind of variation, follow these tips.

### Broadleaf Plant Life

Plant Field Grass tufts that look like saplings in fields and along the edges of fields to model tall broadleaf plant life and saplings.



Place Underbrush, Bushes and Briar Patch on the edges of groups of trees to represent bushes and brambles reaching for sunlight. Grasses don't typically grow all the way up to the base of a tree trunk, so leave some Earth colored Turf underneath.

### Undergrowth

Layer Static Grass over Fine and Coarse Turf to create the appearance of undergrowth beneath the grass. A sparse layer of Static Grass over the Turf will look like there is a thick undergrowth of weeds beneath the Static Grass. Sprinkle Fine or Coarse Turf over the thick applications of Static Grass to create the look of broadleaf plants and weeds that are reaching through the grasses for sunlight.

#### **Animal Paths**

Leave bare spots in fields where animals like cows or deer trample the grass. If you are adding these pathways after installation, use the thatch comb to remove and press down the Static Grass to create a matted look.









#### Fence Lines

Grasses along fence lines tend to be tall because the mower cannot get close enough to the fence. Use Tufts to install tall grasses or apply Static Grass in stages, starting with the taller grass along the fence line.



Apply Static Grass over Ballast, Talus or Gravel along railways and roadways to create the look of grass growing through the rock. Small tufts of grass can be added between rail ties. Make the tuft short enough for a train to pass over without derailing. Trim the tuft with scissors to adjust the height. Use tufts to add grassy strips down gravel roads and weeds popping out of broken sidewalks.





### Finishing Grassy Areas

Finish grassy areas with a light sprinkle of Plant Hues, Fine and Coarse Turf, or Flowers. This will add subtle highlights and lowlights to a grassy area.



**PLANT HUES** 



**FINE TURF** 



**FLOWERS** 



COARSE TURF

# **DESERTS**

Deserts are typically hot and dry with limited plant life, but that does not make them any less impressive. Locations like the Grand Canyon, Australian Outback or the Sahara Desert are known for their unique landscape and colors. Modeling a desert will require some creativity and a willingness to experiment with colors and products.



### MIXING PRODUCTS FOR CUSTOM COLORS

To model a realistic desert, you will need to think outside of a product's primary use. Desert soils are rocky and gravelly, ranging from red and brown to light tan. These colors can be persistent across the whole horizon, or they can be striped or dotted throughout. Use reference photos to identify what soil colors are in the specific desert you want to model. Find similar colors of Earth Colors Liquid Pigment and other products like Turf, Plant Hues, Gravel, Talus, Ballast and Static Grass.

Start by coloring the terrain shell with Earth Colors Liquid Pigment as you normally would. Pick the color that best represents the type of desert you are modeling. As deserts are very rocky, you may want more of the terrain shell to show through than would be present in other scenes. Try opaque coloring to create deep, rich desert terrain colors. Mix pigments together to create custom colors.

Next, you will need to install ground cover over the colored terrain shell. Using a mixture of materials will help create natural variation and interest. Mix the following suggested products in a clear, sealable plastic bag until they match the colors in your reference photos. Then, sprinkle them over the terrain shell or flyspeck onto cliffs and hillsides:

- For gray and whitish deserts- Use Buff Fine Gravel mixed with either Soft Flake Snow™ (for a bright white) or Buff Fine Ballast (for a whitish tan look).
- For tan deserts- Use Buff Fine Ballast mixed with Earth or Yellow Grass Fine Turf. Yellow Grass Fine Turf can be used for highlights and Earth Fine Turf for lowlights. For some darker, coarser texture, add a little Brown Fine Ballast.
- For reddish desert features-Use Iron Ore and Brown Fine Ballast layered or mixed with Buff Fine Ballast.



**BUFF GRAVEL AND SOFT FLAKE SNOW** 



**BUFF GRAVEL AND BUFF BALLAST** 



**BUFF BALLAST** 



BUFF BALLAST AND YELLOW GRASS FINE TURF



**BUFF BALLAST AND EARTH FINE TURF** 



BUFF BALLAST, BROWN BALLAST AND IRON ORE BALLAST



BROWN BALLAST AND IRON ORE BALLAST

### Accenting the Soil Colors

Accenting the desert soil ground cover with different colors or coarser materials will add texture and realism. You can accent desert soil in a variety of ways. Follow the color and texture suggestions below to accent your desert ground cover. Mix the materials in a sealable plastic bag. Then shake the bag until the color is uniform. For fine texture-materials, like Plant Hues, Accent Powder or Fine Turf, use a dry brush and paint them on. Using a dry brush will control the application. If you do not need to control the application, sprinkle the materials on.

- Use Accent Powder, included in the Gravel (page 107) package, to add tan colored lowlights (in light colored deserts) or highlights (in darker colored deserts).
- Mix Golden, Wheat and a small amount of Red Switch Plant Hues (page 130) together. This will create a reddish-light brown mixture. Use this mixture to highlight reddish deserts or add lowlights to a whitish desert.
- Mix Red Switch and Golden Plant Hues together. This will create a red-rust color. Use the mixture to highlight reddish-brown desert soil.
- Use Burnt Grass or Green Grass Fine Turf to add small patches of lowgrowing plant life. Use sparingly.
- Some deserts, like in Nevada and Arizona, have red, orange, yellow or green colors in the rocks and soil. For reddish-yellow areas, mix Red, Orange or Yellow Flowers with Brown and Iron Ore Ballast until the desired color is achieved. For areas with more green, mix Green Grass and Burnt Grass Fine Turf with Yellow Flowers until the desired color is achieved.
- Add coarser Ballast on top of the ground cover to emphasize rocky areas.
   For reddish desert rocks, use different sizes of Iron Ore, Brown and Dark Brown Ballast. Use varying sizes of Buff, Light Gray and Gray Blend Ballast for whitish or tan-colored deserts.
- Use Talus where you need more naturally shaped rocks. You can use
  the available colors individually or mix them together. Color the Talus for
  unique desert rocks. Follow the instructions in the Talus section to color
  Talus with Liquid Pigment (page 121).

