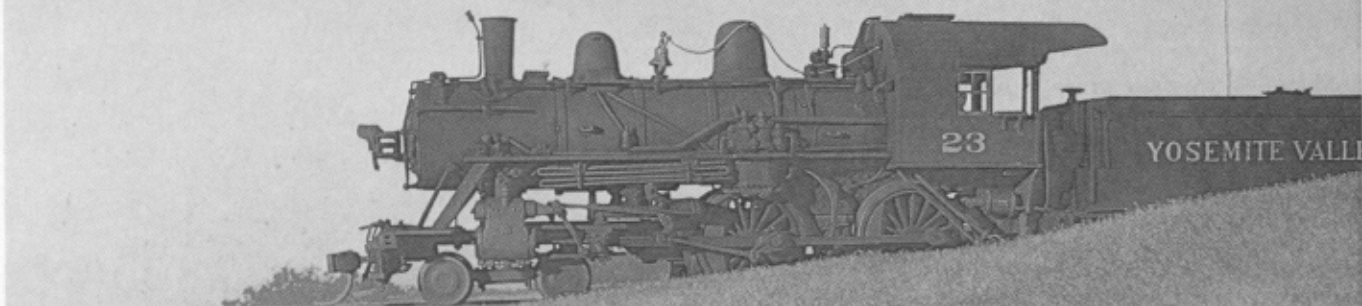


Jack Burgess



Modeling CALIFORNIA'S Golden Grass

Several years ago, in April, 1976, I had an article in RAILROAD MODEL CRAFTSMAN describing how to duplicate large expanses of grasses, especially those typical of California's Sierra Nevada foothills. My prototype, the Yosemite Valley Railroad, traverses miles of such terrain on its way from Merced, California, to

Yosemite National Park. Likewise, my HO scale Yosemite Valley Railroad includes a high percentage of similar vegetation. It was therefore essential that a simple and realistic method be developed to duplicate this effect.

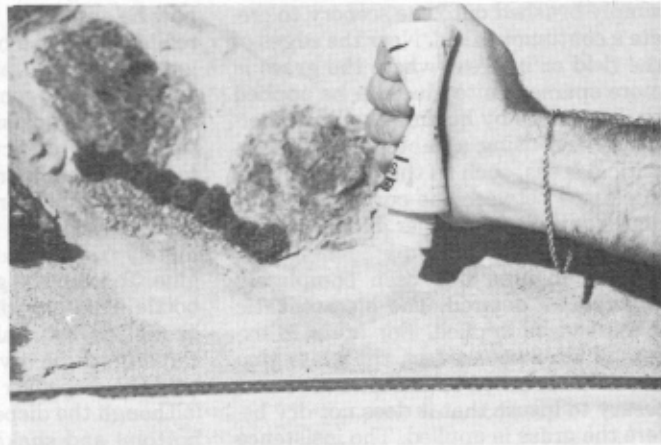
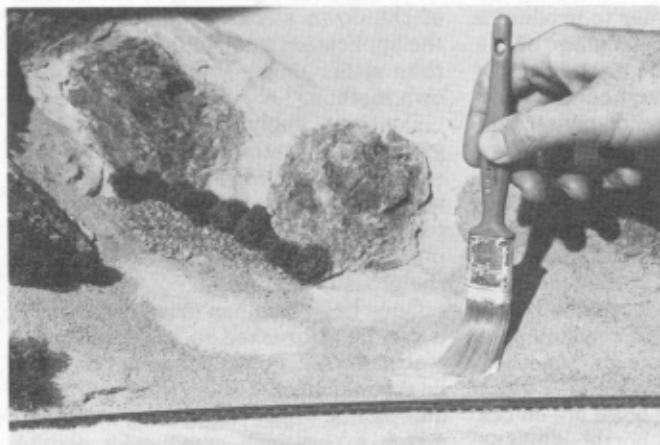
Since that April, 1976, article was published, my techniques have changed slightly, and numerous inquiries by visi-

tors on how the grass was done indicated a need for an update.

The method I use to duplicate California's large expanses of golden grass utilizes flocking or "electrostatic grass". Electrostatic grass is produced by Noch and is available from Walthers. There are other manufacturers and sources; this is the one that I have used. Noch

To use electrostatic grass as a ground cover, start by painting white glue on the scenery, which can be sealed and stained plaster or sifted natural soil bonded to the scenery base coat. Using a

soft plastic refillable applicator bottle, shake and squeeze the fibers onto the glue. Most of the short grass fiber strands will pick up a charge this way and stand up straight.



Spray painting electrostatic grass eliminates its sheen and allows colors to be changed and blended, gold to green, for example. Ground foam, when used, effectively represents other plants types, since it has a different texture. These scenes are on the author's HO scale Yosemite Valley.

produces electrostatic grass in several colors, including light green, dark green, gold, brown and gray. For duplicating yellow grass, I use "gold", which is actually closer to yellow.

One of the keys to using this product is the dispenser itself. The dispenser is a flexible plastic bottle fitted with a removable cap with five $\frac{1}{8}$ " diameter holes. The electrostatic grass must be shot onto the layout using the dispenser. Sprinkling the electrostatic grass by hand will not achieve the desired effect. The dispenser bottle is refillable, however, so there is no need to buy more than one dispenser bottle. Refill packages are inexpensive and the dispenser bottle can be refilled by simply transferring bulk material from the refill bag to the bottle a pinch at a time.

Application of electrostatic grass begins with the scenery surface itself. On my previous layout, I used zip texturing as the primary scenery surface. The present layout utilizes sifted dirt bonded to the plaster sub-base with diluted white glue. (See "Soils for Scenery", April, 1984, RMC.) A tight scenery surface prior to the application of electrostatic grass is essential. It can therefore be worthwhile to vacuum the completed scenery surface prior to the initiation of an electrostatic grass application grass to reveal any loose areas. Electrostatic grass is bonded to the scenery surface using full-strength white glue. Since I use so much white glue in scenery construction, I purchase it by the gallon. I pour a small quantity into a disposable plastic cup and brush it onto the scenery sub-base with an inexpensive latex brush. In areas where the grass is to be solid, the white glue is simply brushed onto the scenery to create a continuous field. Near the edges of the field or in areas where the grass is more sparse, white glue can be applied to the surface by holding the brush vertically and using a dabbing motion. In critical areas, such as the narrow planting strips between the curb and gutter and sidewalk, a smaller brush can be used.

Once an area has been completely covered as desired, the electrostatic grass can be applied. For areas in excess of $1\frac{1}{2}$ -2 square feet, the white glue should be brushed on in sections as necessary to insure that it does not dry before the grass is applied. The insistence



JACK BURGESS PHOTO



on utilizing the dispenser bottle will now be apparent. In order to produce a realistic effect, a high percentage of the grass (strands) must be shot into the white glue and remain vertical or nearly so. The trick to using the dispenser bottle is more difficult to describe than master. The electrostatic grass is shot from the dispenser by rapidly squeezing the bottle while holding it approximately $\frac{3}{4}$ " to $1\frac{1}{2}$ " from the wet white glue. To keep the grass in the dispenser bottle from clogging, I keep the bottle in motion by shaking it continuously. Putting these two motions together, hold the dispenser as you would a glass (although the dispenser holes are on the bottom) and shake the bottle while at

the same time squeezing at the bottom of the down stroke. Again, describing the application method is more difficult than either doing it or devising your own method.

Continue applying the electrostatic grass to the wetted area until the density looks like what you want. Don't worry about how unrealistic the final product appears at this time; it will improve after the white glue has dried and the grass is airbrushed.

Once the grass has dried completely, it can be airbrushed to achieve a more realistic color. For small areas, this can be accomplished using a mixture of Floquil paints. However, mixing a color to match a perceived grass color can be



TWO PHOTOS: BILL SCHALMBURG

more difficult than anticipated. Scenery colors can be very subtle; in order to match California's golden grass color, I brought samples into the layout room for use as color swatches. This insured that the final color not only matched nature, but did so under normal room lighting.

On the present layout, the areas which received electrostatic grass were so extensive that I felt special procedures were necessary to insure that all of the grass areas would match in color, even though application would be spread over a five to seven year period. I therefore chose common household latex paint as a coloring agent. This allowed me to select from an immense

palette of colors and I was able to select a color which I felt matched nature exactly under my lighting. This also insured that the color would be available during the entire scenery construction phase without variations.

Of course, every good idea has its disadvantages. The disadvantage of utilizing water-based latex paint is that airbrushing is difficult. Unlike Floquil and such thinner-based paints, the consistency of latex paints is extremely critical to proper airbrushing. Overspraying can also be a problem. I finally was able to airbrush latex paint by diluting the paint with a combination of water and alcohol. The final proportions and dilution must be arrived at through trial

and error. Latex paint clogs airbrushes quickly, so only relatively small areas can be completed at one time, even with the larger-sized tips made for heavy fluids. I keep soapy water nearby to immediately rinse the airbrush, which must be taken apart and thoroughly cleaned after each session. However, even with these disadvantages, latex paint should be considered if large areas are to be painted.

To minimize overspray, adjacent scenery is protected with masking tape and newspapers prior to airbrushing. For general areas, only buildings, track, rock castings and structures must be protected. For more critical areas, such as planter strips and parkways, tape is applied right to the edge of the grass. If Floquil paints are used, no masking is usually necessary.

No matter how careful you are, some overspray will occur, especially at the edges of the grass application and in areas that are intended to resemble sparsely vegetated areas. If you are using real dirt for a base, such areas can be made to appear extremely realistic by adding additional sifted dirt to the area after the paint has dried. By sprinkling the finest grade of dirt around these areas, the resulting grass will appear to be individual, correctly-colored strands of grass. This can prove to be extremely realistic.

Recognizing that dirt can be added around the perimeter of the grassed-in areas after the grass has been applied and colored opens the door to a number of realistic and special effects. The additional dirt is bonded in place just as the base was bonded.

After I had completed a large area of such scenery on my present layout, Tony Koester, editor at the time, wrote to inquire whether anything in California was actually green. I responded with what I felt was proof—a color photo taken along the abandoned YVRR right-of-way showing miles of continuous “golden” grass. However, Tony examined the same photograph and noticed shades of brown and green. I therefore have since added such highlights and shading with oversprays of Floquil green and Earth.

While I use electrostatic grass primarily for duplicating large expanses of grassy foothills, it can be used in both small and medium sized areas. Possible effects include grassy low spots where water collects from blocked drainage or leaks from a water tank, vacant weed-filled lots (with a shortcut or path diagonally across the lot), and both meadowed areas and grassy dells. This method can also be used to model the large expanses of short-grass prairies in some parts of the country. ☐